

Catalog Home

President's Message

Welcome to California State University, East Bay. We are proud to be a vibrant and exciting institution serving not only our region but the state and beyond. Cal State East Bay has become a destination campus, a campus of choice.

Our mission is to offer a unique opportunity for access to a quality university education. Our welcoming, exciting, multicultural community will prepare you for success in the diverse global economy. You will enjoy abundant opportunities to work closely and collaboratively with faculty and fellow students and to engage with communities in our region, enriching your classroom experiences.

Students who choose East Bay will find their experience here a truly transformative one. We are regionally focused and nationally recognized. Our outstanding faculty and staff are dedicated to student success. In your journey to acquire the skills and knowledge you need, you will find that the many opportunities for faculty and community interaction will prepare you to take your place in our complex technological and global society.

Within this catalog there is an inspiring breadth of offerings. We offer more than 85 degrees at the bachelor's and master's level each year, as well as 33 credential and certificate programs. We also offer a doctoral program in education with an emphasis in educational leadership. As a regional university, Cal State East Bay has campuses in Hayward and Concord, operates a professional development center in downtown Oakland, and offers classes and degree programs online. These options give you a choice of learning communities, convenient locations, and academic programs, each designed to meet your needs.

Our extraordinary faculty integrate scholarship, instruction, and service learning in support of our shared strategic commitments and Institutional Learning Outcomes. Students have unique opportunities to learn and grow through participation in research, project-based learning, artistic and creative efforts, and a growing number of service learning projects. By engaging with the community, you can truly make a difference through internships, cooperative learning programs, and other initiatives that offer real-life experiential learning while assisting our communities.

The catalog is the official guide to your academic program. It contains essential information regarding Cal State East Bay's policies and procedures, and its contents will assist you in making the most of your experience here. Familiarize yourself with its contents and learn how the campus functions. It will become an important tool to assist you in achieving your professional aspirations.

Sincerely,

Leroy M. Morishita
President
California State University, East Bay

Welcome to the 2015-2016 Online Catalog

Cal State East Bay's interactive, fully online catalog contains a number of features to assist you, including advanced search options, user-friendly navigation and a personal portfolio to store favorite programs and courses. If you are new to our online catalog and would like to learn more, click the [link](#) at the top right of any page.

3 Ways to Search the Catalog

1. Use the Catalog Search box at the top left of the page:
Enter a keyword in the box and click

2. Click Advanced Search at the top left of the page:
Narrow your search by checking:

- Courses
- Programs
- Hierarchy items
- Other content

Then type a keyword and click Search

3. Click on a link in the left navigation menu

Academic Calendar

Please check the current Class Schedule for any calendar updates. This calendar is not an employee work calendar. Note: the final examination period extends through the final weekend of the quarter for classes meeting only on weekends.

Fall Quarter 2015

Sept. 21-22	Opening of fall quarter; faculty meetings, late advising
Sept. 24	Classes begin
Nov. 11	Veterans Day observed (University closed)
Nov. 13	Last day to submit thesis to Academic Programs and Graduate Studies Office
Nov. 26-27	Thanksgiving recess (University closed)
Dec. 6	Last day of classes
Dec. 7-13	Final examinations
Dec. 13	End of quarter
Dec. 14-Jan. 3	Academic recess

Winter Quarter 2016

Jan. 4	Opening of winter quarter; Classes begin
Jan. 18	Martin Luther King, Jr. Day (University closed)
Feb. 19	Last day to submit thesis to Academic Programs and Graduate Studies Office
Mar. 13	Last day of classes
Mar. 14-20	Final examinations
Mar. 20	End of quarter
Mar. 21-Mar. 27	Academic recess

Spring Quarter 2016

Mar. 28	Opening of spring quarter; Classes begin
Mar. 31	Cesar Chavez Day (University closed)
May 13	Last day to submit thesis to Academic Programs and Graduate Studies Office
May 30	Memorial Day observed (University closed)
June 5	Last day of classes
June 6-12	Final examinations
June 11, 12	Commencement Ceremonies
June 12	End of quarter
June 13-19	Academic recess

Summer Quarter 2016

June 20	Opening of summer quarter; Classes begin
July 4	Independence Day Observed (University closed)
Aug. 5	Last day to submit thesis to Academic Programs and Graduate Studies Office
Aug. 28	Last day of classes
Aug. 29-Sept. 4	Final examinations
Sept. 4	End of quarter
Sept. 5	Labor Day (University closed)
Sept. 5-18	Academic recess

Undergraduate Admission and Degree Information

Cal State East Bay welcomes students to apply to study at our university. There are four steps to the application process for most prospective students:

1. Applicants must submit an online CSU application for admission at www.csumentor.edu.
2. Applicants must submit all supplementary documents required such as transcripts and standardized test scores.
3. Cal State East Bay will determine an applicant's eligibility based on criteria discussed in this chapter.
4. The university will notify the student of the decision.

How does one become a Cal State East Bay student?

- A prospective student, applying for part-time or full-time undergraduate programs of study, in day or evening classes, must file a complete undergraduate application online and pay a \$55 application fee. The \$55 *non-refundable* application fee should be in the form of a check or money order payable to "The California State University" or the student may use a credit card at the time of submission of the application. The application fee may not be transferred or used to apply to another term.
- The CSU undergraduate and graduate applications are accessible at www.csumentor.edu. Paper applications are not accepted unless the student does not have access to a computer. In those instances, paper applications can be downloaded from the CSU Mentor website.
- An applicant must complete all required information, including the Social Security number. (The university uses this number to accurately identify student records and evaluate financial aid applications.) Be certain to accurately enter the requested academic information. Any misrepresentation could result in an offer of admission being rescinded.
- The applicant must submit all required items indicated on the student's MyCSUEB To Do list at <https://my.csueastbay.edu> by the deadline provided.
- After a student has sent all application materials and fees, they may check the status of their Cal State East Bay application at <https://my.csueastbay.edu>.
- Cal State East Bay corresponds with applicants by mail and by e-mail, so it is important to make sure contact information on the application is complete and accurate.
- If an applicant wants to pursue a major in nursing, they should see the Nursing chapter for special admission requirements.
- The bachelor's degree major in Music requires students audition in order to determine admission. If a student wishes to pursue a major in Music, see the Music chapter for special admissions requirement.
- It is important for students to take time to read this catalog and become familiar with the specific policies and procedures of Cal State East Bay and the CSU system. This will help the student to understand their rights and responsibilities, as well as the rights and responsibilities of the university.

Who must complete an application?

All students in the following categories must complete an undergraduate admission application:

- High school graduates

- Community college transfer students
- Cal State East Bay students who have not been enrolled for three consecutive quarters
- Students who have a degree from a college or university and want a second baccalaureate degree if applying to an eligible program. Learn more about rules and restrictions at www.csueastbay.edu/admission.
- Students who have been enrolled in Continuing Education Special Sessions Programs and Open University
- Students who have attended Cal State East Bay as visiting students from another university
- Students who want to audit classes¹
- Students who were previously admitted to Cal State East Bay for a particular quarter but did not enroll

If a student is uncertain whether they are required to apply, they can contact the Office of Admission at (510) 885-2784.

If an applicant holds a baccalaureate degree and wishes to pursue post-baccalaureate study or a graduate degree, they must submit an application and application fee, even if they are a Cal State East Bay graduate.

The following regulations and procedures govern admission to both the Hayward Hills and Concord campuses. They are subject to change without prior notice if necessary so that university policies are consistent with those established by the Trustees of The California State University.

What are Cal State East Bay's admission procedures and policies?

Requirements for admission to California State University, East Bay are in accordance with Title 5, Chapter 1, Subchapter 3, of the *California Code of Regulations*. Complete information is available at www.csumentor.edu/planning/.

Electronic versions of the CSU undergraduate and graduate applications are accessible at www.csumentor.edu.

Applying online via www.csumentor.edu is expected unless electronic submission is impossible. An acknowledgement will be sent when online applications have been submitted. Paper applications may be downloaded at www.csumentor.edu and mailed to CSUEB's Office of Admission.

The university advises all prospective students to supply complete and accurate information on the admission application, residency questionnaire, and financial aid forms. In addition, students must, when requested, submit authentic and official transcripts of all previous academic work attempted. Failure to file complete, accurate, and authentic application documents may result in denial or rescission of admission, cancellation of academic credit, suspension, or expulsion (Section 41301, Article 1.1 of Title 5, *California Code of Regulations*).

Declaration of Objective

When a student applies for undergraduate admission they may state an objective (major and degree) to be pursued. The applicant may also be admitted as an "Undeclared Student." In addition, once the student has been enrolled at the university, faculty and staff of the Academic Advising and Career Education Center are available to assist the student in selecting a major and degree program. The responsibility for meeting the specific requirements of a program or major rests with the student, but the advisor or the department chair of their selected major will help the student determine the courses remaining for completion of major requirements. Academic Advising and Career Education may also assist the student in determining General Education requirements.

Impacted Programs

The CSU will announce during the fall filing period those campuses or programs that are impacted. Detailed information on campus and program impaction will be available at the following websites:

- www.csumentor.edu
- www.calstate.edu/impactioninfo.shtml
- www.calstate.edu/sas/impaction-campus-info.shtml

Campuses will communicate their supplementary admission criteria for all impacted programs to high schools and community colleges in their service area and will disseminate this information to the public through appropriate media. This information will also be published at the CSU campus individual website and made available online at www.calstate.edu.

Some programs are impacted at every campus where they are offered; others are impacted only at a few campuses. If a student is applying for admission to an impacted program the student must file their application during the initial filing period. If a student wishes to be considered for admission to impacted programs at more than one campus, they should file an application at each campus for which they are seeking admission consideration.

The Nursing major (Clinical portion) is the only impacted program at Cal State East Bay. Supplementary admission criteria are listed in the undergraduate Nursing chapter.

Supplementary Admission Criteria

Each campus with impacted programs uses supplementary admission criteria in screening applicants. Supplementary criteria may include rank-ordering of freshman applicants based on the CSU Eligibility Index Table (see "Eligibility Index" later in this chapter), or rank-ordering of transfer applicants based on the overall transfer grade point average, completion of specified prerequisite courses, and a combination of campus-developed criteria. Applicants for freshman admission to impacted campuses or programs are required to submit scores on either the SAT or the ACT. For fall admission, applicants should take tests as early as possible, and no later than December of the preceding year.

The supplementary admission criteria used by the individual campuses to screen applicants for freshman admission to impacted programs are made available by the campuses to all applicants seeking admission to an impacted program. Details regarding the supplemental admissions criteria are also provided at www.calstate.edu/sas/impactioninfo.shtml.

Use of Social Security Number

Applicants are required to include their correct social security number in designated places on the application for admission pursuant to the authority contained in Section 41201, Title 5, *California Code of Regulations*, and Section 6109 of the Internal Revenue Code (26 U.S.C. 6109). The university uses social security numbers to identify students and their records, including identification for purposes of financial aid eligibility and disbursement and repayment of financial aid and other debts payable to the institution. Also, the Internal Revenue Service requires the university to file information that includes the student's social security number and other information such as the amount paid for qualified tuition, related expenses, and interest on educational loans. This information is used by the IRS to help determine whether the applicant, or a person claiming the applicant as a dependent, may take a credit or deduction when reporting their federal income taxes.

If the student is a taxpayer who claims Hope Scholarship or Lifetime Learning tax credit, the student is required to provide Cal State East Bay with their name, address, and Taxpayer Identification Number.

When is the deadline to apply?

Application Filing Periods

The application filing periods are listed at www.csueastbay.edu/deadlines.

Cal State East Bay accepts applications until its capacity is reached. (Many campuses limit undergraduate admission in an enrollment category due to overall enrollment limits.) If applying after the initial filing period, the student should consult the campus admission office for current information. Similar information is also available at www.csumentor.edu/filing_status/Default.asp.

Does the university have any special provisions for enrollment and admission?

High School Students

High school students may be considered for enrollment in certain special programs if recommended by the principal and the appropriate campus department chair and if preparation is equivalent to that required of eligible California high school graduates. Admission to a special program is valid only for the specific program and does not constitute the student's right to continued enrollment.

Transfer Policies of CSU campuses

Authority for decisions regarding the transfer of undergraduate credits is delegated to each California State University (CSU) campus. Most commonly, the college level credits earned from an institution of higher education which is accredited by a regional accrediting agency recognized by the United States Department of Education are accepted for transfer to campuses of the CSU.

The CSU General Education-Breadth (GE-Breadth) program allows California community college transfer students to fulfill lower-division general education requirements for any CSU campus prior to transfer. Up to 39 of the 48 GE-Breadth units required can be transferred from and certified by a California college. "Certification" is the official notification from a California community college that a transfer student has completed courses fulfilling lower-division general education requirements. The CSU GE-Breadth certification course list for particular community colleges can be accessed at www.assist.org.

Campuses may enter into articulation agreements on either a course for course or program to program basis. Such articulations are common between CSU campuses and any or all of the California community colleges, but may exist between CSU campuses and other institutions. Established CSU/CCC articulations may be found on www.assist.org.

No more than 70 semester units (105 quarter units) may be transferred to a CSU campus from a previously attended institution which does not offer bachelor's degrees or their equivalents, e.g., community colleges.

Non-Matriculated Enrollment

Most courses taught by regular Cal State East Bay faculty are available to students through Open University. To enroll in an Open University course, applicants must complete an online Open University application form each term they wish to attend. The application deadline is the eighth instructional day of the term. Go to <https://www.ce.csueastbay.edu/ce/programs/open-university/> to apply online and view application deadlines. Late applications will not be accepted.

Hardship Petitions

Cal State East Bay has established procedures for consideration of qualified applicants who would be faced with extreme hardship if not admitted. Contact the Office of Admission for information on policies governing hardship admission. Students should also see the "Admissions Appeals" section under "How will the student be informed of the admission decision?" in this chapter.

Educational Opportunity Program

The Educational Opportunity Program is designed to improve access and retention of historically low-income, first generation, and educationally disadvantaged students. EOP identifies and admits students who have the potential to succeed at California State University campuses, but who have not achieved their educational goals because of economic and/or educational background. EOP provides students with the resources, tools and skills to ensure academic and personal success through a variety of academic support services. These services include admission assistance, a Summer Bridge program for first-time freshmen, an EOP Welcome, academic counseling, resources/referral services, and an EOP grant for eligible students.

EOP accepts students who qualify for regular admission, as well as a limited number of students who do not meet regular admission criteria. Only low-income and educationally disadvantaged undergraduate students who need admission assistance and/or support services to succeed at CSUEB are admitted to EOP. Additionally, students must be first generation, California residents or AB 540, and meet the income eligibility criteria. They must also demonstrate academic potential and motivation to succeed.

To apply for admission to the program, prospective students must complete the online CSUMentor Application for Undergraduate Admission and check the appropriate box for EOP services. Once the CSUEB application is submitted (online), EOP applicants will receive an online EOP link and have access to complete the EOP Applicant Information Form and two EOP recommendation forms. Students must have all three documents submitted in order for their EOP application to be complete.

EOP is a high-demand program which only accepts applications for Fall term from applicants new to the CSU system. Currently enrolled and/or previously enrolled students (not formerly in an EOP CSU program) are not eligible to apply. Applicants who submit all required documents will be reviewed and if selected, will be admitted to EOP. All EOP freshmen receiving exception admission are required to attend the EOP Summer Bridge program as a condition of their admission for Fall term.

For assistance or for further information about EOP, please visit the EOP Office at the Library Complex (LI), Room 2500, or online at www.csueastbay.edu/eop. Prospective applicants can also email us at eopadmissions@csueastbay.edu or call 510-885-4683.

Veterans

Veterans who meet the admission requirements may attend under full veterans' benefits. Information concerning veterans' programs is outlined at www.csueastbay.edu/veterans.

First-time freshmen and lower division applicants who are California resident veterans of the U.S. Armed Forces, but who do not meet regular entrance requirements may be considered for undergraduate admission if, in the university's judgment, the veteran has the potential to perform satisfactorily at the collegiate level. To be considered under this provision, veterans must have served 181 days active duty since 1955 with a discharge or separation under conditions other than dishonorable.

If an applicant wishes to be considered under this provision, the application for admission must include supporting documents, including separation papers (DD 214), and a letter petitioning special consideration. Transcripts and test scores are also required.

Early Start Program

All new freshmen students who have not demonstrated college-readiness in mathematics and English will need to begin work on becoming ready for college-level English before the start of their first term.

The goals of Early Start Program are to:

- Better prepare students in math and English, before the fall term of freshman year;
- Add an important and timely assessment tool in preparing students for college; and
- Improve students' chances of successful completion of a college degree.

Newly admitted freshman students who are required to complete Early Start will be notified of the requirement and options for completing the program as part of campus communications to newly admitted students.

Adult Students

If a student is twenty-five years of age or older, they may also be considered for admission as an adult student if all of the following conditions are met:

1. The student has earned a high school diploma (or the equivalent as demonstrated on the Tests of General Educational Development or the California High School Proficiency Examination).
2. The student has not enrolled in college as a full-time student for more than one term during the past five years. Part-time enrollment is permissible.
3. If the student has attended college in the last five years, and has earned a "C" average or better in all college work attempted.

The student's admission will be based upon a judgment as to whether or not they are as likely to succeed as a regularly admitted freshman or transfer student. An assessment of basic skills in the English language and mathematical computation will also be considered in the admission decision. If an applicant is seeking enrollment as an adult student, they must submit a statement to the Office of Admission outlining the factors and experiences which the student believes indicates their probable academic success.

Meningococcal Disease Information

Each incoming freshman who will be residing in on-campus housing will be required to return a form indicating that they have received information about meningococcal disease and the availability of the vaccine to prevent contracting the disease and indicating whether or not the student has chosen to receive the vaccination.

The above are **not** admission requirements, but are required of students as conditions of enrollment in CSU.

How will a student be notified that their application has been received?

An applicant who applies within the published filing period may expect to receive an acknowledgment from the campus to which they applied within two to four weeks of filing an application. This notice may also include a request that the applicant submits additional records necessary to evaluate their academic qualifications. An applicant may be assured of admission if the evaluation of relevant qualifications indicates that he or she meets CSU admission requirements, and in the case of admission impaction, Cal State East Bay requirements for admission to an impacted program. Unless specific written approval/confirmation is received, an offer of admission is not transferable to another term or to another campus.

What information is necessary for evaluation of admission eligibility?

After an applicant receives an acknowledgment from Cal State East Bay that their application has been received, they will be requested to submit required documents (i.e. official transcripts, test scores, etc.), if they have not previously done so. It is the applicant's responsibility to see that all official transcripts are sent directly to the Office of Admission from each previous institution attended by the deadline specified on the student's MyCSUEB To Do List. Neither evaluation of transcripts and test scores nor determination of eligibility is possible until all required documents have been received.

1. First-time freshmen must submit official transcripts of high school work (grades 9-12). Scores from the ACT or SAT examinations are required, unless exempt (see next paragraph); however all students should submit ACT/SAT scores for English and math placement review. If an applicant is still in high school, they must submit transcripts of work as instructed and a final transcript after graduation.

A first-time freshmen or lower division transfer applicant, whose high school grade point average is at least 3.00 (3.61 for nonresidents) will have the test score requirement waived. The applicant's high school grade point average calculation will include only those grades earned in approved college preparatory courses taken during the 10th, 11th, and 12th grades.

2. If an applicant is applying for undergraduate transfer, graduate, or post-baccalaureate admission, they must submit an official transcript from each college or university previously attended by the deadline specified on the student's MyCSUEB To Do List, regardless of length of attendance, and even if no work was completed.
3. If the applicant is a transfer student with fewer than 90 transferable quarter units (60 semester units) the applicant must, in addition to item #2 above, file one official transcript showing courses and grades earned during high school (grades 9-12), as well as scores from the ACT or SAT examinations. If the applicant's high school grade point average is at least 3.00 (3.61 for nonresidents) the test score requirement will be waived.
4. If an applicant is an international student or non-U.S. citizen, they may be required to submit additional records. See "Are there special admission and eligibility requirements for international students?" in this chapter.

Note: The University has the obligation to determine whether a transcript will be accepted as official. All transcripts and records submitted for admission or readmission become the property of the university. Students may access their academic records according to policies and procedures established by the campus. Applicants must submit official transcripts from all colleges and universities they have attended so their entire academic experience can be evaluated. Failure to do so will be grounds for denial of admission or readmission or for dismissal from the university.

How will an applicant be informed of the admission decision?

After an applicant's eligibility has been established, they will receive a letter of admission to the university for the term indicated. The applicant will also be informed of residency status.

Applicants may be assured of admission if the evaluation of relevant qualifications indicates that they meet CSU admission requirements, including if applicable, campus requirements for admission to an impacted program. Unless specific written approval/confirmation is received, an offer of admission is not transferable to another term or to another campus.

The university reserves the right, however, to select its students and to deny admission to the university, or to any of its programs, based upon the university's determination, at its sole discretion, of an applicant's suitability and the best interests of the university.

Re-Routing

If for some reason an applicant cannot be accommodated at Cal State East Bay, their application will be redirected to their second choice CSU campus unless they are seeking admission to a system-wide impacted program or the alternate campus has reached its capacity in the applicant's chosen program of study.

Admissions Appeals

Section 89030.7 of the California Education Code requires the California State University establishes specific requirements for appeal procedures for a denial of admission. Each CSU campus must publish appeal procedures for applicants denied admission to the University. The procedure is limited to addressing campus decisions to deny an applicant admission to the University.

Admissions appeal procedures must address the basis for appeals, provide 15 business days for an applicant to submit an appeal, stipulate a maximum of one appeal per academic term, provide specific contact information for the individual or office to which the appeal should be submitted and must also be published on the campus website.

If the applicant does not meet published admission eligibility standards, the student may petition the Admissions Appeals Committee for reconsideration. There is a limit on the number of exceptions to published admission criteria for which the campus may grant an exception. The Committee, therefore, considers a number of factors, normally favoring applicants who are close to qualifying and who are upper division students. Instructions for submitting an appeal are provided to eligible denied students.

If the applicant comes from a disadvantaged background or is a veteran, they may be considered under special criteria in addition to that stated above.

What are the minimum admission requirements for freshmen?

Generally, a first-time freshman applicant will qualify for regular admission if they meet the following requirements:

- The student has graduated from high school, have earned a Certificate of General Education Development (GED) or have passed the California High School Proficiency Examination; and
- The student has a qualified minimum eligibility index (see the Eligibility Index Table in this section); and
- The student has completed, with grades of "C" or better, each of the courses in the comprehensive pattern of college preparatory subject requirements, also known as the "a-g" pattern. (See "Subject Requirements" later in this section.) Courses must be completed prior to your enrollment in The California State University (special high school programs are exempted from this rule).

Eligibility Index

The eligibility index is the combination of the high school grade point average and scores on either the American College Test (ACT) or the SAT (math and critical reading sections only). Grade point averages (GPA) are based on grades earned in courses taken during the final three years of high school. Included in the calculation of the GPA are grades earned in all college preparatory "a-g" subject requirements taken in 10th-12th grades, and bonus points for approved honors courses (excluding physical education and military science).

Up to eight semesters of honors courses taken in the last three years of high school (including up to two approved courses taken in the tenth grade) can be accepted. Each unit of "A" in an honors course will receive a total of 5 points; "B," 4 points; and "C," 3

points. Up to two 11th grade IB, AP or honors courses with 11th or 12th grade course content taken in 10th grade may also receive bonus points.

A CSU Eligibility Index (EI) can be calculated by multiplying the grade point average by 800 and adding the total score on the SAT (the mathematics and critical reading scores). If a student took the ACT, the EI is calculated by multiplying their grade point average by 200 and adding ten times the ACT composite score. Students who are California high school graduates (or residents of California for tuition purposes), need a minimum index of 2900 using the SAT or 694 using the ACT. The Eligibility Index Table illustrates a matrix of eligible required test scores and grade point averages. If a student applies for admission before graduating from high school, they should compute their GPA using grades earned in courses completed after the 9th grade. Do not include grades expected to be earned in courses during the remainder of the 12th grade.

The university has no current plans to include the writing scores from either of the admissions tests in the computation of the CSU Eligibility Index.

Students who neither graduated from a California high school nor those who are a resident of California for tuition purposes, need a minimum index of 3502 (SAT) or 842 (ACT). Graduates of secondary schools in foreign countries must be judged to have academic preparation and abilities equivalent to applicants eligible under this section. (See "Are there special admission and eligibility requirements for international students?" in this chapter.)

An applicant with a grade point average of 3.00 or above (3.61 for nonresidents), is not required to submit test scores. However, all applicants for admission are urged to take the SAT or ACT and provide the scores of such tests to each CSU where they seek admission. Campuses use these test results for advising, course placement, and determination of Early Start participation, and may require them for admission to impacted majors or programs. Impacted CSU campuses require SAT or ACT scores of all applicants for freshman admission.

An applicant will qualify for regular admission when the university verifies that the applicant has graduated from high school, has a qualifying minimum eligibility index and has completed the comprehensive pattern of college preparatory "a-g" subjects. Applicants applying to an impacted program must also meet all required supplementary criteria.

Note: The CSU uses only the ACT score or the SAT mathematics and critical reading scores in its admission eligibility equation. The SAT or ACT writing scores are not currently used by CSU campuses.

Eligibility Index Table for California High School Graduates or Residents of California:

3.00 and above qualifies with any score

GPA	Act Score	SAT Score (Math and Critical Reading total)
2.99	10	510
2.98	10	520
2.97	10	530
2.96	11	540
2.95	11	540
2.94	11	550

Eligibility Index Table for California High School Graduates or Residents of California:

3.00 and above qualifies with any score

GPA	Act Score	SAT Score (Math and Critical Reading total)
2.93	11	560
2.92	11	570
2.91	12	580
2.90	12	580
2.89	12	590
2.88	12	600
2.87	12	610
2.86	13	620
2.85	13	620
2.84	13	630
2.83	13	640
2.82	13	650
2.81	14	660
2.80	14	660
2.79	14	670
2.78	14	680
2.77	14	690
2.76	15	700
2.75	15	700
2.74	15	710
2.73	15	720

Eligibility Index Table for California High School Graduates or Residents of California

3.00 and above qualifies with any score

GPA	Act Score	SAT Score (Math and Critical Reading total)
2.72	15	730
2.71	16	740
2.70	16	740
2.69	16	750
2.68	16	760
2.67	16	770
2.66	17	780
2.65	17	780
2.64	17	790
2.63	17	800
2.62	17	810
2.61	18	820
2.60	18	820
2.59	18	830
2.58	18	840
2.57	18	850
2.56	19	860
2.55	19	860
2.54	19	870
2.53	19	880
2.52	19	890

Eligibility Index Table for California High School Graduates or Residents of California:

3.00 and above qualifies with any score

GPA	Act Score	SAT Score (Math and Critical Reading total)
2.51	20	900
2.50	20	900
2.49	20	910
2.48	20	920
2.47	20	930
2.46	21	940
2.45	21	940
2.44	21	950
2.43	21	960
2.42	21	970
2.41	22	980
2.40	22	980
2.39	22	990
2.38	22	1000
2.37	22	1010
2.36	23	1020
2.35	23	1020
2.34	23	1030
2.33	23	1040
2.32	23	1050
2.31	24	1060

Eligibility Index Table for California High School Graduates or Residents of California

3.00 and above qualifies with any score

GPA	Act Score	SAT Score (Math and Critical Reading total)
2.30	24	1060
2.29	24	1070
2.28	24	1080
2.27	24	1090
2.26	25	1100
2.25	25	1100
2.24	25	1110
2.23	25	1120
2.22	25	1130
2.21	26	1140
2.20	26	1140
2.19	26	1150
2.18	26	1160
2.17	26	1170
2.16	27	1180
2.15	27	1180
2.14	27	1190
2.13	27	1200
2.12	27	1210
2.11	28	1220
2.10	28	1220

Eligibility Index Table for California High School Graduates or Residents of California

3.00 and above qualifies with any score

GPA	Act Score	SAT Score (Math and Critical Reading total)
2.09	28	1230
2.08	28	1240
2.07	28	1250
2.06	29	1260
2.05	29	1260
2.04	29	1270
2.03	29	1280
2.02	29	1290
2.01	30	1300
2.00	30	1300

Subject Requirements

The California State University requires that first-time freshmen applicants complete, with grades of "C" or better, a comprehensive pattern of college preparatory study totaling 15 units. A "unit" is equivalent to one year of study in high school. This pattern includes:

- English: four years
- Mathematics: three years (algebra, geometry, and intermediate algebra)
- Social Science: two years, including one year of U.S. history or U.S. history and government
- Laboratory Science: two years (one year of biological and one year of physical science, both must include laboratory instruction)
- Foreign Language: two years in the same foreign language (subject to waiver for applicants demonstrating equivalent competence)
- Visual and Performing Arts: one year in the same discipline (art, dance, drama/theater, or music)
- Electives: one year (selected from English, advanced mathematics, social science, history, laboratory science, foreign language, and visual and performing arts or other courses approved and included on the UC/CSU "A-G" list.)

Foreign Language Subject Requirement

The foreign language subject requirement may be satisfied by demonstrating competence in a language other than English at a level equivalent to, or higher than, that expected of students who complete two years of foreign language study. An applicant should consult their school counselor, or the Office of Admission for more information.

Test Requirements

Prospective freshman and transfer applicants who have fewer than 60 semester or 90 quarter units of transferable college credit are strongly encouraged to submit scores, unless exempt, (see Eligibility Index Table) from either the SAT of the College Board or the ACT. If a student is required to submit test scores, they should take the test no later than early December if applying for fall admission. Those applying to an impacted program (e.g., Nursing), must check with the department for additional admission requirements. Test scores are also used for advising and placement purposes. Registration forms and dates for the SAT or ACT are available from school or college counselors, or from Cal State East Bay's Testing Office (510) 885-3661. Applicants may also write or call:

The College Board (SAT)
Registration Unit, Box 6200
Princeton, New Jersey 08541-6200
(609) 771-7588
www.collegeboard.org

ACT
Registration Unit, P.O. Box 414
Iowa City, Iowa 52240
(319) 337-1270
www.act.org

Honors Courses

Grades earned in up to eight semester courses designated as honors courses in approved subjects (taken in the last two years of high school), receive additional points in grade point average calculations. Each unit of "A" in approved courses will receive a total of 5 points; "B," 4 points; "C," 3 points; "D," 1 point; and none for "F" grades. (Up to two 11th grade IB, AP, or honors courses with 11th or 12th grade course content taken in 10th grade may also receive bonus points.)

Provisional Admission

Cal State East Bay may provisionally or conditionally admit first-time freshman applicants based on their academic preparation through the junior year of high school and planned for the senior year. The campus will monitor the final terms of study to ensure that admitted students complete their secondary school studies satisfactorily, including the required college preparatory subjects, and to ensure students have graduated from high school. Students are required to submit an official transcript after graduation to certify that all course work has been satisfactorily completed. Official high school transcripts must be received prior to the deadline set by the university. In no case may documentation of high school graduation be received any later than the census date for a student's first term of CSU enrollment. A campus may rescind admission decisions, cancel financial aid awards, withdraw housing contracts and cancel any university registration for students who are found not to be eligible after the final transcript has been evaluated.

Applicants will qualify for regular (non-provisional) admission when the university verifies that they have graduated and have received a high school diploma, have a qualifying minimum eligibility index, have completed the comprehensive pattern of

college preparatory "a-g" subjects, and, if applying to an impacted program or campus, have met all required supplemental criteria.

Admission with Honors

To qualify for Admission with Honors, applicants must also fully satisfy the Subject Requirements for admission to Cal State East Bay. Students admitted with Honors are eligible for the CSUEB University Honors Program (see the University Honors Program section in the Student Services chapter of this catalog).

First-Time Freshmen. The status of Admission with Honors is conferred on a student whose high school GPA is a minimum of 3.50, counting all subjects used to determine admissibility beginning with the tenth grade.

Lower Division Transfers. The status of Admission with Honors is conferred on a student whose high school record is at least equivalent to that of a first-time freshman receiving honors. In addition, the student must have a combined all-college GPA in transferable courses of a minimum of 3.50, based on work completed. Note: CSUEB does not accept lower-division transfer applicants.

Upper Division Transfers. The status of Admission with Honors is conferred on a student whose combined all-college GPA is a minimum 3.50 based on transferable work completed.

What are the minimum admission standards for transfer students?

Students who have completed fewer than 60 transferable semester college units (or fewer than 90 quarter units) are considered lower division transfer students. Students who have completed 60 or more transferable semester college units (90 or more quarter units) are considered upper division transfer students. Students who complete college units during high school or during the summer immediately following high school graduation are considered first-time freshmen and must meet those admission requirements. Transferable courses are those designated for baccalaureate credit by the college or university offering the courses and accepted as such by the campus to which the applicant seeks admission.

Lower Division Transfer Requirements

Generally, a student qualifies for admission as a lower division transfer student at Cal State East Bay if they have a grade point average of at least 2.0 ("C" or better) in all transferable units attempted and attained and is in good standing at the last college or university attended, and meets any of the following standards:

- The applicant meets all freshman admission requirements (grade point and subject requirements) in effect for the term of application (see "What are the minimum admission requirements for freshmen?")

or

- The applicant was eligible for admission as a freshman at the time of high school graduation (except for the subject requirements), has been in continuous attendance at an accredited college since high school graduation, and has successfully completed the missing subjects.

Applicants who graduated from high school prior to 1988 should contact the Office of Admission to inquire about alternative admission programs.

Note: Due to enrollment pressures many CSU campuses do not admit lower division transfer applicants. CSUEB does not currently accept lower-division transfer applicants.

Making Up Missing College Preparatory Subject Requirements

Lower division applicants who did not complete the subject requirements while in high school may make up missing subjects in any of the following ways.

1. Complete appropriate courses with a "C" or better in adult school or high school summer sessions.
2. Complete appropriate college courses with a "C" or better. (One college course of at least three semester or four quarter units is considered equivalent to one year of high school study.)
3. Earn acceptable scores on specified examinations, e.g., SAT subject tests.

Contact the Office of Admission for further information about alternative ways to satisfy the subject requirements. (*Due to enrollment pressures, many CSU campuses do not admit lower division transfer applicants.*)

Upper Division Transfer Requirements

Generally, applicants will qualify for admission as an upper division transfer student if each of the following criteria have been met:

1. The applicant has earned a grade point average of at least 2.0 ("C" or better) in at least 60 semester (90 quarter) units of transferable college credit.
2. The applicant was in good standing at the last college or university attended.
3. The applicant has completed at least 60 semester (90 quarter) units that must be selected from transferable college courses in English, arts and humanities, social science, science and mathematics. The 60 semester (90 quarter) units must also include at least 30 units of courses, which meet CSU general education requirement, including all of the general education requirements in oral and written communication in the English language and critical thinking and the requirement in mathematics/quantitative reasoning (usually 3 semester/4.5 quarter units) **OR** the Intersegmental General Education Transfer Curriculum (IGETC) requirements in English communication and mathematical concepts and quantitative reasoning. Each course satisfying General Education Requirements in written communication, oral communication, critical thinking and mathematics must be completed with a grade of C or higher.

Student Transfer Achievement Reform (STAR) Act (SB 1440)

The Student Transfer Achievement Reform (STAR) Act (SB 1440) establishes an Associate in Arts (AA-T) or Associate in Science (AS-T) for transfer for California Community College student and is designed to provide a clear pathway to the CSU degree major.

California Community College students who earn a transfer associate (AA-T or AS-T) degree are guaranteed admission with junior standing to the CSU and given priority admission over other transfer students when applying to a local campus, or non-impacted program. AA-T or AS-T admission applicants are given priority consideration to impacted campus and/or program that has been deemed similar to the degree completed at the community college. Students who have completed an AA-T/AS-T in a program deemed similar to a CSU major are able to complete remaining requirements for graduation within 60 semester units.

Provisional Admission

Cal State East Bay may provisionally or conditionally admit transfer applicants based on their academic preparation and courses planned for completion. The campus will monitor the final terms to ensure that those admitted complete all required courses

satisfactorily. All admitted applicants are required to submit an official transcript of all college-level work completed. The university will rescind admission for all students who are found not to be eligible after the final transcript has been evaluated. In no case may such documents be received and validated by the university any later than a student's registration for his/her second term of CSU enrollment.

How are a student's transfer units evaluated?

Credits earned in accredited community colleges will be evaluated by the Office of Admission in accordance with the following provisions:

1. Not more than 105 quarter (70 semester) units of credit may be allowed for community college work; community college credit earned after the student has earned 105 quarter units at one or more community colleges will be used for determining grade point averages and may be used to satisfy subject requirements, but may not be applied toward the total units required for the bachelor's degree.
2. No credit may be allowed for professional courses in education taken in a community college, other than an introduction to education course.
3. Cal State East Bay and California community colleges have articulation agreements regarding course equivalencies. If you are planning to transfer to Cal State East Bay you should consult with your community college counselors as to whether or not particular courses meet CSU specific requirements.
4. Certification of part or all of the lower division General Education-Breadth Requirements completed may be submitted by the California community college from which the student is transferring. Students should request a General Education (G.E.) certification at the time they request a transcript to be sent to Cal State East Bay. Twelve upper division G.E. units must be completed at Cal State East Bay.
5. Certification of the completion of the Cal State East Bay requirements in U.S. History and Institutions will also be accepted from your community college.

Credit from institutions not regionally accredited will not be used in determining admission eligibility, nor will it normally be used to meet graduation requirements. However, after completing 30 quarter units in residence, you may petition the Office of the Registrar to have such units accepted for baccalaureate credit. Course content, the quality of performance, the nature of the institution, and the appropriateness of the courses to the Cal State East Bay curriculum will be considered in evaluating any petition.

Academic Advising and Career Education (AACE)

AACE academic advisors are available to discuss and explain your transfer evaluation or the degree audit you will receive from the Office of the Registrar. An official evaluation or an update of a prior evaluation is available by appointment. (See the Student Services chapter in this catalog for additional information on AACE.)

Credit for Continuing Education and Correspondence School Work

Students may count a maximum of 36 quarter (24 semester) units of extension credit and correspondence school work toward a baccalaureate degree at Cal State East Bay. Any such units not earned at Cal State East Bay must be earned in courses deemed acceptable for Cal State East Bay degrees and course units must come from accredited institutions that accept the units toward their own degrees.

No extension or correspondence school credit may be applied toward the residency requirement for undergraduates or graduates. Courses taken in Cal State East Bay Special Sessions programs may be applied toward residency. All transferable extension and correspondence work will be used for determination of the undergraduate grade point average.

Credit for Experience and Prior Learning

No unit credit is allowed toward the bachelor's or master's degrees for practical experience. An exemption allowed for experience will not carry units of advanced standing or diminish the number of units required for graduation.

Credit for Military Training and USAFI

Cal State East Bay grants nine units of elective credit toward a baccalaureate degree for a student who completed basic training and was honorably discharged from military service of the United States in accordance with the recommendation of the American Council on Education. Credit is not given for completion of the six month reserve training programs. Commissioned officers may receive an additional nine units, which may be considered upper division credit. In order to receive such credit applicants must present written certification from a recognized military authority, such as papers from a military separation center (service form DD-214) or a Joint Services Transcript (JST). Credit for specific courses may be allowed if the student has satisfactorily completed equivalent study in a military service school. The guidelines of the American Council on Education are followed in determining eligibility. Cal State East Bay is a Service member Opportunity College (SOC).

Credit for Non-collegiate Instruction

Cal State East Bay grants undergraduate degree credit for successful completion of non-collegiate instruction, either military or civilian, appropriate to the baccalaureate, that has been recommended by the American Council on Education (ACE) College Credit Recommendation Service or by the National Program on Non-Collegiate Sponsored Instruction (NCSI). The number of units allowed are those recommended in the national guides published by these organizations.

Lower division, occupational courses designed to train technicians are not acceptable for university credit. Credit granted for non-collegiate instruction is not generally applied to general education or major requirements.

Advanced Placement and International Baccalaureate

Cal State East Bay grants credit toward its undergraduate degrees for successful completion of International Baccalaureate (IB) and Advanced Placement (AP) program tests. Students will be granted 4-12 quarter units of college credit (up to 30 total units) for each test completed, depending upon the specific discipline. (See the Registration Chapter for additional information.)

Are there special admission and eligibility requirements for international students?

Admission Requirements

Cal State East Bay must assess the academic preparation of international students. For this purpose, "international students" include those who hold U.S. visas as students, exchange visitors, or in other nonimmigrant classifications. California residents and U.S. citizens with international transcripts are also classified as "international students" for admission evaluation purposes.

There are separate requirements for the admission of international students. Verification of English proficiency, financial resources, and academic performance are all important considerations for admission. Each applicant must have a declared educational objective (major) when the application is filed.

Priority in admission is given to residents of California for majors that are impacted or for programs with limited openings.

Application Filing Periods and Deadlines for International Students

The university has established deadlines to ensure that all application materials will be processed in time to allow international students to make the necessary passport, visa, travel, and other arrangements to reach the campus before the start of the quarter of admission. Current deadlines applicable to international student admission can be found on the university website or by contacting the International Admissions Office (iao@csueastbay.edu).

First-time Freshmen

If you received your preparatory education outside the U.S., you must have completed the equivalent of 12 years of elementary and secondary schooling with the equivalent of a "B" average or higher. **ACT or SAT test scores are not required of international students who completed their secondary schooling outside the U.S.** International students who graduated from a U.S. high school must meet the same requirements as U.S. citizens.

Transfer students

1. If you are a transfer applicant with fewer than 60 semester (90 quarter) units of transferable work completed at the time of planned enrollment, you must have a 2.0 GPA or higher in all transferable units attempted. You must also meet the eligibility requirements for first-time freshmen applicants. (See "What are the minimum admission requirements for freshmen?" earlier in this chapter.)
2. If you are a transfer applicant with 60 semester (90 quarter) units or more, you must have a 2.0 GPA or higher in all transferable units attempted.

Transfer students with university-level work earned outside the U.S. will be accepted if the overall grade point average of that work is equivalent to the stated minimum grade point average requirements for admission. Transfer credit for university-level course work earned outside of the U.S. will be awarded after a course-by-course evaluation by the International Admissions Office.

Academic Records

Certificates, diplomas, mark sheets, transcripts, and test scores must be sent directly from the issuing institution to the International Admissions Office to be considered official. The International Admissions Office reserves the right to determine what constitutes an official document. Certified English translations must accompany all non-English original documents. Documents submitted are the property of Cal State East Bay and will not be returned.

English Language Requirement

If you are an undergraduate applicant whose native language is not English and you have not attended schools at the secondary level, or above, for at least three years full-time where English is the principal language of instruction, you must present one of the following:

TOEFL (Test of English as a Foreign Language) Undergraduate: 525 (paper-based); 197 (computer-based); 61 (internet-based)

IELTS (International English Language Testing System) Undergraduate: 6.0

APIEL (Advanced Placement International English Test) Undergraduate only: 3

ELPT (English Language Proficiency Test, part of the SAT II) Only undergraduates and only U.S. citizens or permanent residents of the U.S. may use this test.

Each campus will post the tests it accepts on its website and will notify students after they apply about the tests it accepts and when to submit scores.

Financial Certification

International students who wish to apply for a student visa must demonstrate financial support before a letter of admission or an "I-20" or "DS-2019" form will be issued. The following forms must be submitted: I-20 Letter of Consent, Declaration of Finances, and Health Insurance Compliance. These forms can be downloaded from the "Apply Online" option on the university website.

Enrollment Requirements for F-1/J-1 Visa Students

If you are an undergraduate on a student visa, you are required by the U.S. Citizenship and Immigration Services to take a minimum study load of 12 units per quarter.

When enrolled at Cal State East Bay, international students are expected to comply with all regulations of the U.S. Citizenship and Immigration Services pertaining to international students as well as those of the university.

F-1/J-1 international students should contact the Center for International Education (cie@csueastbay.edu) for information on matters affecting visa status, eligibility for employment, and any special academic requirements for international students.

Other Non-U.S. Citizens

Admission eligibility for students who are not U.S. citizens or permanent residents, and are not on student visas, will be based upon the same standards applied to international students who are on student visas. You are expected to have proficiency in the English language sufficient to meet the academic standards of individual courses and the university English proficiency requirements. Evidence of proficiency in English is the same as for international students. (See "English Proficiency Requirement for Undergraduate Applicants" section above.)

What are the enrollment requirements for transitory (visiting) students?

High School Students

See "Does the university have any special provisions for enrollment and admission?" in this chapter.

Intrasystem and Intersystem Enrollment Programs

Students enrolled at any CSU campus have access to courses at other CSU campuses on a space-available basis, unless those campuses or programs are impacted or their admission to the desired program or admission categories are closed. This access is offered without the students being required to be formally admitted to the host campus, and sometimes without requiring payment of additional fees. Although courses taken on any CSU campus will transfer to the student's home CSU campus as at least elective credit, the student should consult their home campus academic advisor to determine how such courses may apply to their specific degree program before enrolling at the host campus.

There are two programs for enrollment with the CSU, and one for enrollment between the CSU and the University of California or California community colleges. Additional information about these programs is available from Office of the Registrar.

CSU Concurrent Enrollment: matriculated students in good standing may enroll on a space available basis at both their home CSU campus and a host CSU campus during the same term. Credit earned at the host campus is reported at the student's request

to the home campus and included on the student's transcript at the home campus.

CSU Visitor Enrollment: matriculated students in good standing enrolled at one CSU campus may enroll on a space available basis at another CSU campus for one term. Credit earned at the host campus is reported at the student's request to the home campus and included on the student's transcript at the home campus.

Intersystem Cross-Enrollment: matriculated CSU, UC, or community college students may enroll for one course per term at another CSU, UC, or community college and request that a transcript of record be sent to the home campus.

Cross-Registration Program with the University of California, Berkeley (UCB)

The purpose of this program is to increase a student's educational opportunities by maximizing the use of existing programs and courses available in the East Bay region. The following conditions apply:

1. No course of instruction available at Cal State East Bay may be taken in the other system. Enrollment is limited to one course per term.
2. Students may seek to enroll in a course offered at UCB upon the recommendation of their academic advisor and department chair. These advisors should insure the completion of any prerequisites before application is made. (Forms are available from Enrollment Management.)
3. Students may seek to enroll in a course offered at UCB only with the permission of the course instructor, and the approval of the appropriate department chair and school/college dean. Each university gives first registration priority to its own students; therefore, concurrent enrollment may not be available in courses with limited spaces. A Cal State East Bay student should return the completed form and card to 120 Sproul Hall at UCB.
4. Students must be in good standing, be matriculated in a degree program (undergraduate or graduate) and have a full-time schedule (12 quarter units for undergraduates and 8 units of graduate level courses for graduate status) at Cal State East Bay in order to participate in the program. Cross-registration with UCB is normally not permitted during your first term of enrollment at Cal State East Bay. (Note that UCB is on the early Semester Calendar and Cal State East Bay is on the Quarter Calendar.)
5. Each campus has appointed a coordinator of the cooperative program who verifies the satisfaction of conditions 1-4 for each prospective participating student. The Office of the Registrar coordinates the program at Cal State East Bay.
6. No additional costs are charged to the student at Cal State East Bay. However, you will be billed the Cal State East Bay rates for the total academic load in the combined registrations. Because of the interval involved in sending transcripts, there will be a time lag in the appearance of grades on Cal State East Bay's permanent records.
7. Cross-registration is only possible in the fall and winter quarters because UCB is on the semester system.
8. Cross-registration will be cancelled at any time if the student becomes ineligible for participation.

Cross-Registration with Other Bay Area Two-Year and Four-Year Institutions

Programs have also been established to permit students from Cal State East Bay and those from Cañada College, Chabot College, College of Alameda, Contra Costa College, Diablo Valley College, Holy Names University, John F. Kennedy University, Laney College, Las Positas College, Los Medanos College, Merritt College, Mills College, The National Hispanic University, Ohlone College, Solano College, St. Mary's College, and U.C. Berkeley to take coursework at another school which is not available at

their home campus. Contact the counseling center or registrar at the host campus (or the Office of the Registrar at Cal State East Bay) for information on eligibility requirements, limitations and other privileges or restrictions.

Online Degree Program State Authorization

Note: State and federal laws require colleges and universities to be authorized to offer online degree programs in states other than their own. At this time, CSU East Bay may not be authorized to offer online degree programs for students residing in certain states. Please go to http://www20.csueastbay.edu/online/admissions-and-costs/state_authorization.html for further information.

Baccalaureate Degree: Defined

A baccalaureate degree, often called a bachelor's degree, is the academic title that the university confers after successful completion of a minimum number of college credit units (180 quarter units at Cal State East Bay), including certain specified patterns of coursework (for example, General Education and a major), a minimum number of advanced units (60 upper division) with a grade point average of at least 2.00 (on a 4.00 point scale), and various other requirements specified in Title 5 of the California Code of Regulations. Some students in higher unit majors will complete more than the minimum 180 units for their degree. Cal State East Bay offers three baccalaureate degrees, a Bachelor of Arts (B.A.) degree, a Bachelor of Fine Arts (B.F.A.), and a Bachelor of Science (B.S.) degree. The degree awarded appears on your diploma and permanent record.

Many students are able to attend school full-time (three quarters) and earn 15-16 units a term. Because some students have commitments other than college, they take fewer units and occasionally do not attend every quarter. Consequently they take longer to complete their degrees.

Cal State East Bay operates on a year-round, four-quarter system. Hence, by taking a full academic load of 15-16 units per quarter, four quarters a year, it is possible to graduate in three years. (A maximum of 105 units completed at a community college and transfer them to a CSU campus.)

Information concerning the graduation rates of students enrolling at Cal State East Bay is available online at: <http://www.csueastbay.edu/ira/>.

Baccalaureate Degree Requirements

There are three major parts of a baccalaureate degree and seven basic requirements defined in the California Code of Regulations. Most courses will fall into one of the three major parts of the degree: (1) the General Education (G.E.) requirements for basic skills and breadth, (2) the major for depth in one field, and (3) free electives which can shape your education in directions you choose. Each of these will be described in later sections.

These are the seven basic requirements for your B.A. or B.S. degree defined in the Code:

- Complete a 72 quarter-unit program of General Education-Breadth requirements including 12 upper-division (3000 or higher) units in G.E. Areas B6, C4, D4 (details to follow).
- Complete one of the majors described in this catalog.
- Complete the U.S. history, U.S. Constitution, and California state and local government requirement through coursework or exams (details to follow). You must also complete one course for the Cultural Groups/Women requirement.
- Satisfy the University Writing Skills Requirement by passing two freshman-level English composition courses (ENGL 1001 and 1002) and the upper division University Writing Skills Requirement (details to follow).
- Complete a minimum of 45 quarter units in residence enrolled as an admitted student at Cal State East Bay. Up to 36 units taken through Open University and Special Session may be counted for residence. Units in residence must include

at least 36 upper division units, 18 units in your major, and 12 units of G.E. (Units you earn at other institutions, and units you earn through Credit-by-Examination are not residence units.)

- Complete at least 180 quarter units for your B.A. degree, 182 quarter units for your B.F.A. degree, or 180-190 quarter units for your B.S. degree. At least 60 of these units must be in upper division courses (courses numbered 3000 and above). No more than 60 units can be graded in the Credit/No Credit pattern (CR/NC or A/B/C/NC). No more than 36 units can be in Continuing Education, Open University, or correspondence credit, and no more than 45 units can be earned credit-by-examination (excepting Advanced Placement).
- Attain a grade point average of at least 2.00 on a 4.00 scale in all units you attempt at Cal State East Bay, all the units you attempt including transfer units, and all units you attempt in the major regardless of the department in which they are taught.

Catalog Rights for Graduation

To meet the seven requirements listed in the previous section, you must follow the specifics listed in this catalog. As long as you maintain attendance by enrolling in at least two quarters each calendar year, your degree requirements will remain those in this catalog. However, you may elect to meet the requirements of the catalog in effect at the time you graduate. These principles are called your "catalog rights."

If you are absent due to an approved Educational Leave or to attend another accredited institution of higher education, you will not lose your catalog rights as long as you are not away for over two years.

If you are a transfer student who attended another CSU campus and/or California community college, you have Cal State East Bay catalog rights from the time you began at the other institution if you have maintained attendance as noted above.

Your catalog rights for your major (and minor if you pursue one) are governed by the catalog in effect at the time you declare your major (or minor). Cal State East Bay publishes an annual online Catalog, but in past years only published a printed Catalog every other year with the last edition printed for the 2010-2012 years. If you entered in the second year of a printed catalog, you should check the online catalog for that year to see if there were any changes affecting your major and/or minor graduation requirements. You will not lose your catalog rights for G.E. and other graduation requirements by declaring or changing your major, if you maintain attendance.

If you do break attendance by not enrolling in two quarters in a calendar year, your graduation requirements will be governed by the catalog in effect at the time you reenter.

The principle of catalog rights refers to degree requirements, not policies, fees, services, and other matters which, when they change, apply to all students. For that reason, you should check the latest online catalog.

General Education-Breadth Requirements

The Cal State East Bay General Education (G.E.) Program is designed so that, taken with the major depth program and electives, it will assure that graduates have made measurable progress toward becoming truly educated persons for a diverse society. Particularly, the purpose of the G.E. Program is to provide means whereby graduates:

- achieve the ability to think clearly and logically, to find information and examine it critically, to communicate orally and in writing, and to reason quantitatively;
- acquire appreciable knowledge about their own bodies and minds, about how human society has developed and how it now functions, about the physical world in which they live, about the other forms of life with which they share that world, and about the cultural endeavors and legacies of their civilizations;
- come to an understanding and appreciation of the principles, methodologies, value systems, and thought processes employed in human inquiries;

- come to understand and appreciate the contributions to knowledge and civilization that members of diverse cultural groups and women have made.

The General Education Program is planned and organized to enable students to acquire abilities, knowledge, understanding, and appreciation as interrelated elements, not as isolated fragments.

The California State University G.E. program requires at least 72 quarter units distributed over six areas and governed by three general requirements. Transfer students must earn 60 units in lower-division courses that meet the requirements of the CSU or IGETC transfer plan. Twelve units of upper-division G.E. will be completed at CSUEB. The lists of courses meeting the requirements change from quarter to quarter and are not included in this catalog because they rapidly become outdated. The list of courses currently meeting each requirement appears in the online Class Schedule each quarter or at:
<http://www20.csueastbay.edu/ge>.

Before progressing very far into your G.E. and other degree requirements, be certain you have developed the **entry-level learning skills** in English composition and mathematics necessary for collegiate success. You must take the EPT/ELM tests before your first enrollment (if not exempt by the other test scores listed in the Registration chapter). If your skills are such that you can begin taking college-level English composition math or statistics immediately, do so at your earliest opportunity, as a freshman if at all possible. (Many majors, including Business Administration and the sciences, require much more math or statistics than the single G.E. course.)

If your skills are not at the collegiate level, you must enroll in Early Start during the summer before your freshman year, enroll in the appropriate remedial course(s) (again, described in the Registration chapter) in your first quarter and complete all remedial courses you need as soon as possible, as a freshman if at all possible. Students who fail the same remedial course twice, fail to enroll continuously in remediation as long as it is required, and/or who fail to complete remediation in six quarters will not be allowed to continue. More information about the Early Start Program may be found at:

<http://www20.csueastbay.edu/prospective/after-youre-accepted/early-start/>.

You will not be allowed to register once you have earned 90 units if your first freshman English composition course (ENGL 1001 or equivalent for G.E. Area A2) and your quantitative reasoning course (G.E. Area B4) have not been passed. Cal State East Bay requires that your freshman English composition course be passed before you attempt the Writing Skills Test in your first quarter with junior status (90 or more quarter units).

A word is necessary about the relationship of G.E. to your major. Normally no course in your major department, as designated by course prefix (for example, ANTH, ENGL, GEOL, MUS) can be applied to G.E., even if not applied to your major requirements. For Business Administration majors, courses with the prefixes ACCT, ENTR, FIN, ITM, MGMT, and MKTG will not count for G.E.; and THEA and DANC courses cannot be used by Theatre Arts majors. The only exceptions to this rule are in Area A, in Area B4, in Area C for a MLL course in another language from those in the major, in Area G4, and one course in a thematic freshman learning community (B1-3, C1-3, or D1-3).

On the other hand, courses required for your major, but offered by other departments (for example, MATH for Geology majors, MLL for English majors), can be applied to G.E.

This is why it is important to know your major before you get too far into the G.E. program. Most majors specify certain G.E. courses for their students. If you take a course other than the one specified, you will have to take the required course anyway. Also, if you do not know your major, you could take a course that subsequently ends up in your major and lose it for G.E. credit.

You can view and print the General Education Requirements for Native or Transfer students, as well as Graduation Checklists, respectively, by clicking the appropriate pdf link below.

Links to printable pdfs:

General Education Requirements for Native Students
 Graduation Checklist for Native Students
 General Education Requirements for Transfer Students
 Graduation Checklist for Transfer Students

Narrative Description of G.E. Requirements

Lower Division G.E. Requirements (60 Units)

Area A: Communication in the English Language (12 units)

You must complete this area of the G.E. Requirements in your freshman year unless a year or more of remediation is required. You must enroll in sections of Area A1 and A2 courses which are linked to the freshman thematic learning community you select in Area B, Area C, or Area D. You must also enroll in an activity class each of the first two quarters of the learning community (see Area G, G.E. Electives).

A1 Oral Communication (4 units)

Students who have completed general education requirements should be grounded in the rhetorical principles that govern public presentations. These principles are fundamental to sound reasoning and clear expression. The principles foster open-mindedness and information competence combined with critical thinking and analytical skills, and an awareness of, and ability to adapt to audience, context, and purpose.

Criteria: A course meeting the Oral Communication requirement is based upon communication theory presented through lecture, discussion, and reading. It must provide several opportunities for a planned sequence of speaking and listening experiences in at least two of the following modes: (a) small-group (problem-solving) discussion, (b) interpersonal communication, (c) expository discourse presented extemporaneously, (d) argumentative and persuasive discourse presented extemporaneously. The course must provide you with constructive criticism of both substance and form of communication and must reflect awareness of the cognitive and emotional conditions dealt with by people who communicate with others. You will complete at least five oral assignments demonstrating increasing skill in oral communication.

Student Learning Outcomes

Upon completion of your A1 requirement, you should have developed the following competencies in speaking and listening.

Speaking: (1) know how to choose and narrow a topic appropriately for a specific audience and occasion; (2) communicate the thesis/specific purpose in a manner appropriate for the audience and the occasion; (3) provide appropriate supporting material based on the audience and occasion and using appropriate technology (PowerPoint, demonstration, etc.) to present the material to the audience; (4) present logically sound, non-fallacious arguments; (5) recognize and address audience viewpoints appropriately; (6) present ideas organized in a fashion appropriate to topic, audience, occasion, and purpose; (7) use language, vocal variety, and physical behaviors that are appropriate to the audience, occasion and purpose and maintain interest and support the verbal message.

Listening: (1) recognize that listening is an interaction among the speaker, message, and audience; (2) understand the public or private context in which the interaction occurs; (3) engage with the ideas, the supporting details, and the relationships among ideas; (4) attend to messages with an open mind; (5) question speakers and messages; (6) evaluate messages using criteria appropriate to the context.

A2 Written Communication (4 units)

A course satisfying Area A2 must be passed with a grade of "A," "B," "C," or "CR."

Students who have completed general education requirements should be grounded in the rhetorical principles that govern reading and writing. These principles are fundamental to logical thinking and clear expression. For reading, they presume open-mindedness combined with critical thinking and analytical skills; and for writing, they presume an awareness of audience, context, and purpose.

Criteria: A course meeting the freshman composition requirement assumes that you should, at the time of entry, be able to write brief essays showing adequacy in (a) selection of a controlling idea appropriate to the given writing task, (b) coherent development of that idea to a reasoned conclusion, (c) use of sentences that demonstrate some structural variety and contain

language appropriate to the audience and purposes, and (d) control of conventions of standard written English (relative freedom from errors such as fragments, run-together sentences, faulty agreement, and improper pronoun reference) and of mechanics (capitalization, spelling, and punctuation). The work of the freshman English course is to strengthen these skills by extensive practice in the writing of expository essays suitable for college-level credit. If you are not exempt from the EPT and do not score 147 or higher on the test, you must pass one or more remedial English courses before enrolling in the A2 course (see Registration chapter). G.E. Area A2 must be completed by the time you reach 90 quarter units or future registration will be blocked.

Student Learning Outcomes

Upon completion of your A2 requirement, you should have developed the following competencies: (1) read for the meaning of a text by determining its purpose, intended audience, and significance; (2) understand the historical context of the text; (3) engage with and offer thoughtful responses to ideas in the text; (4) question authors and texts; (5) evaluate the text according to criteria appropriate to the context; (6) realize that writing is a recursive process involving prewriting and revision; (7) compose an essay with a clear thesis and evidence to support the thesis; (8) understand the role of logically sequenced and fully developed paragraphs; (9) develop and have confidence in one's own ideas; (10) demonstrate awareness of other points of view and how to address them; (11) incorporate research into an essay, including summarizing, paraphrasing, and properly quoting and citing material from other sources; (12) know the ethics of academic writing and of accuracy in the use of evidence; (13) organize an essay in light of audience expectations; (14) present material logically and without fallacies; (15) present material in language appropriate for the context, usually in standard written English that is grammatically and syntactically correct; (16) be familiar with strategies for timed writing.

A3 Critical Thinking (4 units)

Students who have completed critical thinking requirements will develop clarity and rigor in reasoning and its presentation, and the ability to understand, represent, and evaluate the presentations of reasoning made by others.

Criteria: A course meeting the critical thinking G.E. requirement focuses primarily on: (a) identifying, analyzing, evaluating, and presenting arguments, (b) learning elementary inductive and deductive reasoning, and (c) recognizing formal and informal fallacies. You will complete a minimum of six assignments demonstrating critical thinking in a variety of contexts. At least four of these assignments must be written. A critical thinking textbook or its equivalent is required in all courses meeting this requirement.

Student Learning Outcomes

Upon completion of your A3 requirement, you should have developed the following competencies: (1) use the rules and strategies of deductive, inductive, and natural language reasoning; (2) apply the rules and strategies for testing validity; (3) evaluate statistical reasoning; (4) recognize fallacies of reasoning; (5) present orally and in writing well reasoned cases both to support a proposition and to refute another's claim.

Area B: Natural Sciences and Quantitative Reasoning (16 units)

Students who have completed natural science and quantitative reasoning requirements will gain basic knowledge and learn key principles in the life and physical sciences, recognize the vital role experiments play in adding to scientific knowledge, and understand modern methods and tools used in scientific inquiry.

Criteria: G.E. courses in the physical and life sciences teach the methodologies of science, including systematic observation and experimentation. The laboratory course required in this General Education Area provides first-hand experience in making observations in the natural world or laboratory, the techniques and procedures of making those observations, and techniques and procedures for organizing and analyzing observations. In addition to a working knowledge of the methods of science, you will acquire an understanding of the fundamental principles of particular disciplines.

B1-3, 5 (12 units)

You must select one course in physical science and one in life science, courses from three different disciplines, and at least one of the courses must have a laboratory. You may select a freshman learning community or complete your science requirements in your second year. Sophomore courses assume a higher level of basic skills (completion of Area A and B4 requirements).

Student Learning Outcomes

Upon completion of your B1-3 requirements, you should have developed the following competencies: (1) demonstrate broad science content knowledge in the physical and life sciences; (2) demonstrate the application of quantitative skills to science problems; (3) demonstrate a general understanding of the nature of science, the methods applied in scientific investigations, and the value of those methods in developing a rigorous understanding of the physical and living world; (4) identify the difference between science and other fields of knowledge; (5) distinguish science from pseudoscience.

B4 One Course in Quantitative Reasoning (4 units)

A course satisfying Area B4 must be passed with a grade of "A," "B," "C," or "CR."

Criteria: G.E. courses in quantitative reasoning teach you skills and concepts that build on what you have previously mastered in intermediate algebra. Courses that satisfy Area B4 foster the development and use of formal skills and concepts appropriate to the specific course. They emphasize problem solving, reasoning skills, and the communication of mathematical or statistical ideas. If you are not exempt from the ELM requirement and do not score 50 or higher on the test, you must pass one or more remedial Mathematics courses before enrolling in the B4 course (see Registration chapter).

Student Learning Outcomes

Upon completion of your B4 requirement, you should have developed the following competencies.

Quantitative Literacy: (1) know formal mathematical concepts and formulae; (2) find sources for key mathematical ideas.

Numeracy Skills (Reasoning): (1) manipulate and use theories; (2) graphically display and interpret quantitative results; (3) perform basic arithmetic skills.

Problem Solving (Thinking): (1) identify and analyze real or potential problems; (2) apply appropriate quantitative theories; (3) evaluate appropriate quantitative measures; (4) explain or discuss results in quantitative terms.

You must complete your quantitative reasoning G.E. requirement in your freshman year unless three quarters of remediation are needed. In any case, G.E. Area B4 must be completed by the time you reach 90 quarter units or future registration will be blocked.

Area C: Humanities (12 units)

C1-3 (12 units)

You must select one course in the Fine Arts and one in Letters (see below) and courses from three different disciplines. You may select a freshman learning community or complete your Humanities requirements in your second year. Sophomore courses assume a higher level of basic skills (completion of Area A requirements). No Cal State East Bay course used to meet the U.S. history and government code requirement may be applied to Area C. Language courses taken to clear Area C1, Fine Arts, may not be taken credit-by-exam.

Student Learning Outcomes

Upon completion of your C1-3 requirements, you should have developed the following competencies: (1) demonstrate through oral and written works how foundational works in the humanities illuminate enduring human concerns and the intellectual and cultural traditions within which these concerns arise, including both classical and contemporary artists and theorists; (2) demonstrate a developing understanding of how historical and cultural contexts, individual works, and the development of humanities over time, interact; (3) demonstrate ability to critically employ concepts, theories, and methods of analysis used in the humanities to interpret and evaluate enduring human concerns; (4) critically reflect on the formation of human goals and values,

and articulate an understanding of the creativity reflected in works of the humanities that influenced the formation of those values.

C1 Fine Arts (4 units)

Criteria: Courses meeting this requirement have as their major component the integration of evaluative and descriptive aspects of the history, theory, aesthetics, and criticism of different works, forms, styles, and schools of art.

C2 Letters (4 units)

Criteria: Courses in this area examine significant written and oral texts of the creative intellect. The major goals are: (a) to teach the critical examination of ideas and theories through the use of historical, linguistic, literary, philosophical, and rhetorical approaches and methods; and (b) to encourage understanding of enduring human concerns and the intellectual and cultural traditions within which they arise.

C3 An Additional Humanities Course in either Fine Arts or Letters

Area D: Social Sciences (12 units)

Students who have completed social science requirements will become acquainted with basic principles, methodologies, theoretical problems, and applications in those sciences whose field of study is human behavior in its social environment. No Cal State East Bay course used to meet the U.S. history and government code requirement may be applied to Area D.

D1-3 Basic Requirements (12 units)

You must select three courses in the social sciences from three different disciplines. You may select a freshman learning community or complete your social sciences requirements in your second year. Sophomore courses assume a higher level of basic skills (completion of Area A and B4 requirements).

Student Learning Outcomes

Upon completion of your D1-3 requirements, you should have developed the following competencies: (1) demonstrate, orally and in writing, recognition of the application of disciplinary concepts derived from at least three social or behavioral sciences in the study of human behavior, individually and in society; (2) demonstrate, orally and in writing, recognition of the inquiry methods used by at least one of the social or behavioral science disciplines; (3) demonstrate, orally and in writing, the ability to describe how human diversity and the diversity of human societies influence our understanding of human behavior, individually and in societies, both local and global; (4) demonstrate, orally and in writing, some knowledge of the political, social, and/or economic institutions of a country other than the United States; (5) demonstrate, orally and in writing, the ability to describe major positions and contrasting arguments made on one or more significant contemporary issue area confronting U.S. society as applied to human behavior.

Criteria: Courses fulfilling the Basic Social Science requirements present the fundamental principles and methods of inquiry that are grounded in social science disciplines.

Area F: Performing Arts and Activities (4 units)

Criteria: Courses in this area provide an opportunity to develop an appreciation of the visual and performing arts and activities through direct experience. Students are guided by participation toward an understanding of the techniques, processes, and possibilities inherent in such aspects of culture as art, theatre, music, creative writing, and sport. Courses in this area enhance student development through accomplishment. At least 40% of the class time in these courses must be activity or performance.

Area G: Electives (4 units)

G1-2-3 Activity Courses Accompanying Freshman Learning Communities (2 units)

This is a one-unit and two .5-unit activity courses (two hours of class) which accompany the freshman learning communities (Areas B1-3, C1-3, D1-3).

Criteria: They integrate the thematic and Area A course content, build learning communities, and integrate academic skill development and support services. They also include the development and honing of particular skills (e.g., writing, speaking, calculating, and reasoning) at various levels depending on the individual student's proficiency.

G4 Information Literacy (2 units)

Criteria: Courses fulfilling this G.E. requirement develop information processing and technical competencies. The former include the ability to recognize a need; find resources; access, evaluate, and organize information; understand ethical, social and legal dimensions; and communicate information. The latter include the ability to select and use the appropriate technology.

Upper Division G.E. Requirements (12 units)

To be eligible to begin taking upper division G.E. courses, you must have completed 90 quarter (60 semester) units, your lower division G.E. requirements, including critical thinking (Area A3), ENGL 1002, and the University Writing Skills Requirement. You may complete Areas B6, C4, and D4 in your junior or senior year.

The 12-unit upper division General Education program of Cal State East Bay serves a variety of purposes. It enables students to study subjects outside their majors at a more advanced level than in lower division G.E. courses by building on the skills developed in earlier classes in English composition, oral communication, critical thinking, and information literacy. The upper division Science course (Area B6) focuses on scientific inquiry and stresses numeracy, quantitative analysis, information literacy, and critical thinking skills. The upper division Humanities course (Area C4) focuses on history, literature, and philosophy, and stresses advanced writing, speaking, and reasoning skills. The Social Sciences course (Area D4) focuses on the application of the methodologies and research findings of the social sciences to significant contemporary problems, and stresses advanced writing and information literacy skills.

Upper division G.E. courses also give students the opportunity to explore new subjects unrelated to their majors, or to complement their majors with supportive courses in departments outside their major department. Students may ask their major advisors for a list of courses that relate to, and support study in their major field.

Area B6: Upper Division Science (4 units)

A 4-unit upper division course in the sciences (life or physical science) that includes numeracy, quantitative analysis, information literacy, and critical thinking skills. Students must complete their lower division B1-5 requirements prior to taking their B6 course.

Student Learning Outcomes

Upon completion of your B6 requirement, you should have developed the following competencies: (1) demonstrate advanced and/or focused science content knowledge in a specific scientific field using appropriate vocabulary and referencing appropriate concepts (such as models, uncertainties, hypotheses, theories, and technologies); (2) apply advanced quantitative skills (such as statistics, algebraic solutions, interpretation of graphical data) to scientific problems; (3) demonstrate understanding of the nature of science and scientific inquiry and the experimental and empirical methodologies utilized in science to investigate a scientific question or issue; (4) critically analyze scientific claims and data; (5) apply science content knowledge to contemporary scientific issues (e.g., global warming) and technologies (e.g., cloning), where appropriate.

Area C4: Upper Division Humanities (4 units)

A 4-unit upper division course in the humanities (history, literature, philosophy) that includes a significant writing component and emphasizes advanced communication and critical thinking skills.

Student Learning Outcomes

Upon completion of your C4 requirement, you should have developed the following competencies: (1) demonstrate an understanding of, and ability to, apply the principles, methodologies, value systems, and thought processes employed in human inquiries; (2) demonstrate an understanding of the cultural endeavors and legacies of human civilization; (3) be able to discuss

and deliberate about opposing viewpoints in an insightful and logical manner; be able to present an opposing side fairly and to criticize the argument rather than attacking the person; (4) demonstrate a developing intellectual curiosity and a habit of lifelong learning through choice of research topics, the number and quality of questions asked in class, the application of course concepts or themes to lived experiences or world events, or through other similar means; (5) demonstrate the potential for participating in, and contributing to, a democratic society as an informed, engaged, and reflective citizen.

Area D4: Upper Division Social Sciences (4 units)

A 4-unit upper division course applying the research findings of the social sciences to significant contemporary problems and emphasizing advanced writing and information literacy skills.

Student Learning Outcomes

Upon completion of your D4 requirement, you should have developed the following competencies: (1) demonstrate an understanding of and ability to accurately apply disciplinary concepts of the social or behavioral sciences to the study of human behavior, individually and in society; (2) demonstrate an understanding of, and the ability to, effectively conduct or plan research using an inquiry method of the social or behavioral sciences; (3) explain in writing, using examples, how human diversity and the diversity of human societies influence our understanding of individual and collective human behavior; (4) develop advanced skills in oral and written argument in the social or behavioral sciences.

General Degree Requirements

These are to be satisfied simultaneously with the lower and upper division Area requirements described above.

- A total of 72 quarter units of coursework are required to meet the General Education-Breadth Requirements. Normally, no course taken in the major department, as designated by course prefix, may be applied to the 72-unit G.E. program. Exceptions are: (1) in Areas A, B4, and G4 and one course in one thematic learning community (B1-3, C1-3, D1-3), unless certified by California community colleges and/or other CSU campuses; (2) Modern Language majors may use courses in another language; (3) a course required for the major, but not offered by the major department, may be applied to G.E. No course taken to satisfy the U.S. History, U.S. Constitution, and California State and Local Government requirement may be applied to G.E. unless certified by California community colleges or other CSU campuses. No cooperative education courses may be applied to G.E.
- Must complete ENGL 1002 (College Writing II) or transfer equivalent before attaining 90 quarter units.
- Complete U.S. History, U.S. Constitution and California State and local government requirement through coursework or exams (details to follow).
- A minimum of 12 quarter units of the General Education-Breadth Requirements must be taken in residence at Cal State East Bay. (You are in residence if admitted to and regularly enrolled in the university).
- A minimum of 12 quarter units of upper division (3000 and above) coursework applicable to the General Education-Breadth Requirements must be taken after you attain upper division status (90 or more quarter units). You cannot use community college courses to satisfy this requirement. You must take these 12 units in Areas B6, C4, and D4. No course taken in the major department, as designated by course prefix, may be applied to the upper division G.E. requirement.
- A minimum of 3 quarter units of coursework must recognize the contributions to American civilization and knowledge that members of various cultural groups and women have made. The purpose of this requirement is to provide you with an introduction to the research, literature, and methodologies of the disciplines of ethnic studies and gender/women's studies from historical, cultural, social, and economic perspectives. Courses are taught by faculty committed to the four competencies listed below and are designed to give you a comprehensive understanding of the contributions to U.S. society made by cultural groups [African Americans, Asian Americans, Latino(a) Americans, Native Americans] women, and gays/lesbians (hereafter referred to as "groups").

Student Learning Outcomes

Upon completion of your Cultural Groups/Women requirement, you should have developed the following competencies: (1) knowledge of, and respect for, one or more of the groups and their contributions to U.S. society, including, but not limited to,

three or more of the following aspects-historical, linguistic, cultural, economic, political, literary; (2) ability to analyze critically the relationships between the groups and the dominant society, between the groups themselves, and between members of the same group; (3) working knowledge of the groups' histories and contemporary experiences as subjects (as opposed to objects or victims) and of their voices and expressions, including, but not limited to, oral traditions, writings, and art forms; (4) comprehension of the origins and functions of discrimination, exploitation, and oppression of the groups, both historically and in the present, and ability to identify various patterns of discrimination.

Transfer Students

Under Chancellor's Executive Order No. 1033, up to 60 quarter (40 semester) units of the CSU General Education-Breadth Requirements may be **certified by California Community Colleges and other CSU campuses**. Certification is not automatic for the A.A. in University Studies programs. You should note that even though your certification from a California Community College (CSU G.E. pattern for CSU **Intersegmental General Education Transfer Education Transfer Curriculum-IGETC**) or another CSU campus may show more than the maximum number of certifiable units, you must still complete a minimum of 12 upper division residence G.E. units at Cal State East Bay.

For example, if your catalog rights for graduation are governed by this catalog, you must complete the following:

- Area B6, an upper division Science (life or physical science) course of at least 4 units selected from the Area B6 list;
- Area C4, an upper division Humanities course of at least 4 units selected from the Area C4 literature/history/philosophy list;
- Area D4, an upper division Social Science course of at least 4 units selected from the Area D4 list;
- Lifelong Understanding G.E. requirement may be satisfied with a certified Lifelong Understanding transfer course from a California Community College. If you do not transfer with this requirement fulfilled, you may satisfy it with a lower- or upper-division course selected from the Area F list, Performing Arts/Activities, or by a transfer course(s) that meets the CSUEB criteria.
- The Cultural Groups/Women General requirement may be satisfied simultaneously with one of the above lower or upper division Area G.E. requirements, or as a separate course selected from Cal State East Bay's Cultural Groups/Women list. This requirement can also be satisfied by a lower division G.E. transfer course that meets the CSUEB criteria; and
- The second composition requirement for transfer students, is satisfied with ENGL 1002 (College Writing II), or an equivalent transfer course. If the course you are using to clear Area A3, Critical Thinking, is on the IGETC Critical Thinking list, this same course can be used to clear your second composition requirement.

If your catalog rights for graduation fall under an earlier catalog, see the General Education web page (www.csueastbay.edu/ge/transfer.htm) to identify requirements for that catalog.

You must complete at least 45 quarter (30 semester) units of G.E. including G.E. Areas A (Communication in the English Language) and B4 (Quantitative Reasoning) before transferring as a junior.

Major: Defined

A major is a specified pattern of courses in a particular discipline or group of disciplines. (A list of Cal State East Bay undergraduate majors appears on the Undergraduate Majors and Options page of this catalog.) It complements G.E. by allowing you to specialize in one area, to study it in more depth than the one or two courses taken for G.E. in other disciplines. A few majors (such as Music and Spanish) are self-contained in the major department and have no courses that can double-count in G.E. Most majors, however, require some coursework in other departments and these courses, if applicable to G.E., can be double-counted. You can design an Interdisciplinary Studies Major with faculty advice and administrative support (see the Interdisciplinary Studies Major chapter of this catalog).

A major is not the same as a career, though some majors are more closely allied to specific careers than others. There are people in most careers from a wide variety of majors. Cal State East Bay majors are described in the Undergraduate section of this catalog, and career options are listed for each of them.

A B.S. degree major often requires more units than a B.A. degree major. A B.F.A. degree major requires more units than most B.S. or B.A. degree majors because it is so specialized.

You may declare your major either on your application when you apply to Cal State East Bay or after you enroll by filling out a "Change of Major" form available in the Student Enrollment and Information Center, 1st Floor, Student Services and Administration Building, online at the Student Records Forms website, or in the Student Services Center at the Concord Campus.

You may complete more than one major with permission. All majors earned will appear on the same diploma.

Option: Defined

An option is a prescribed pathway through a major which allows for emphasis on a particular segment of the discipline (for example, the Accounting Option in the Business Administration Major and the Dance Option in the Theatre Arts Major). Not all majors have formal options. Some majors with formal options require you to select an option (e.g., Business Administration) whereas others do not (e.g., Political Science). In some majors, different options have different total unit requirements.

An option can appear on your diploma if you request it when filing for graduation. If you wish to complete more than one option and have the additional option(s) recorded, each must differ by at least three courses and nine units from any other option you complete.

Free Electives

Most students have some units not prescribed by G.E., the major, or other graduation requirements. These range from one or two courses in a few very large, occupationally oriented majors to a dozen or more courses in some humanities and social science majors.

Free electives are courses you are free to select to complete your minimum unit requirements for the degree. Some students complete free electives with whatever looks interesting when they have free hours in their schedules, but most students have a purpose in mind. This could be taking more courses in the major to prepare for graduate school or employment, taking a minor or certificate program (defined below) to complement the major (e.g., an English major taking a Marketing minor), or simply following a special interest (e.g., dance or photography). No student is required to do any of these things, but it is important that you understand your choices.

Minor: Defined

A minor is a coherent program in some field or group of related fields other than your major. Minors range in size from 24-48 quarter units, at least 12 of which must be upper division. No student is required to have a minor, so it will not appear on your record or diploma unless you request it. The minimum grade point average for a minor is 2.00, so you must take at least one course on the A-F grading pattern. At least 50% of a minor or 12 units, whichever is less, must be taken at Cal State East Bay if you want the minor recognized on your diploma and/or permanent record.

Courses in a minor may be double-counted in G.E. However, at least 18 quarter units of a minor must not be double-counted in the discipline of the major for Cal State East Bay to recognize the minor.

If you wish to complete a minor, fill out a "Change of Major, Minor, Option" form available online at the Student Records Forms website.

You cannot get a minor in the same department as your major unless the disciplines are distinct (e.g., French and Spanish, Art History and Studio Art). A minor is recognized only when a baccalaureate degree is awarded.

Certificate Program: Defined

A certificate program is a coherent set of academic courses, considerably narrower in scope and objectives than a degree or major, for which you can receive a certificate upon its successful completion. Most certificate programs are oriented toward occupations and/or career skills. A certificate program must contain at least 12 units of courses numbered 3000 or above and a minimum of 20 total units (unless the certificate consists solely of 5000- and 6000-level courses in which case only 15 units are required). Each certificate program must contain a required core of at least three courses and 12 units. You can design a special certificate with faculty advice. See "Special Certificates" in the Interdisciplinary Studies Major chapter of this catalog.

Some certificate programs have admission requirements. Refer to the catalog description of the specific certificate program for more information. You must receive a grade of "C" or better in each undergraduate and 5000-level course and a "B" or better in each graduate course (6000-level) applied to the program. Only one course below the 6000-level may be taken "CR/NC" and no graduate course may be taken "CR/NC" in a certificate program unless that is the only grading pattern for the course. You must take at least 75% of the courses and all 5000- and 6000-level courses at Cal State East Bay. (For certificate programs, Cal State East Bay courses may be taken through University Extension or as a regularly admitted and enrolled student.) You may not receive a certificate if you have already received a major, option, or minor with the same title.

No student is required to complete a certificate program. Completion of a certificate program is recognized by the awarding of a certificate. There is no notation about the program on either a diploma or permanent record. (The courses will, of course, be on your permanent record.) You may pursue a certificate program before, during, or after your baccalaureate degree. Unlike a minor, a certificate is not part of a degree.

U.S History and Government Code Requirement

CSU graduates are expected to have knowledge of: significant events in U.S. history; the role of major ethnic and social groups in these events; the political, economic, social, and geographic context of these events; the U.S. Constitution, U.S. political institutions and processes; the rights and obligations of U.S. citizens; the California Constitution; federal-state relations; and California state and local government, and political processes.

You can demonstrate your competence in these fields by either: (a) passing one of three CLEP tests offered each quarter by the Testing Office, and passing a Category II (ASSIST US-3) course, or (b) passing two courses (one course from each of the following two categories) which cover all three topics:

- First Category (ASSIST US-1 and/or ASSIST US-2): ES 1201 - Ethnicity in American History I; HIST 1101 - History of the United States to 1877; POSC 1201 - American Political Institutions; HIST 3400 - America to 1900; HIST 3540 - The Making of the U.S. Constitution; POSC 3441 - American Constitutional Law: Government; POSC 3442 - American Constitutional Law: Rights.
- Second Category (ASSIST US-3): ES 1202 - Ethnicity in American History II; HIST 1102 - History of the United States Since 1877; POSC 1202 - Public Policy/California Politics; HIST 3500 - History of California; POSC 3120 - State and Local Politics and Government; POSC 3150 - Politics of California.

Be aware that receiving credit for any courses applicable to this requirement through a national test such as Advanced Placement, CLEP, or at an out-of-state institution will not satisfy the California state and local government part of this requirement. You will still be required to complete a Category II course (ASSIST US-3) in the second category above.

University Writing Skills Requirement

In addition to the lower-division General Education requirements in writing, the California State University system requires all students to demonstrate writing competency at the university level in order to receive a baccalaureate or master's degree. This requirement was implemented system-wide in 1977. You must satisfy the University Writing Skills Requirement (UWSR) in order to receive a degree from CSUEB unless you are exempt by one of the following criteria:

1. If you have previously satisfied the Graduation Writing Assessment Requirement at CSUEB or at another CSU campus, CSUEB will accept official certification of completion if the entire requirement, as specified by that CSU campus, was satisfied and you were a matriculated student at the time.
2. If you have graduated from any one of the CSU campuses; unless it is noted on your transcript that your USWR was not satisfied.
3. If you received an essay score of 4.5 or higher on the GMAT or GRE or an essay score of 53 or higher on the CBEST.
4. If you pass the Writing Skills Test (WST) at CAL STATE East Bay. See WST (Option One) below for details.
5. If you pass a first-tier writing course and possibly a second-tier writing course (if needed). See Course (Option Two) below for details.

As soon as you have completed 90 quarter units, you will be required to begin steps to satisfy the University Writing Skills Requirement. DO NOT try to satisfy this requirement before completing 90 units or the UWSR will not be met. Complete ENGL 1001 and ENGL 1002, which are graduation degree requirements, before attempting to satisfy the UWSR.

To satisfy the requirement at CSUEB, you may do one of the following:

- Option One: Register for and pass the Writing Skills Test (WST). See WST (Option One) below.
- Option Two: Enroll in and pass a first-tier writing course (ENGL 3000 or ENGL 3001) and possibly a second-tier course, as well. See Course (Option Two) below.

WST (Option One): The Writing Skills Test consists of an analytic essay that requires you to demonstrate that you can think and write critically. You must pass the WST and satisfy the UWSR with a score of Clear Competence (8) to meet the requirement. If you fail the WST, you have only one opportunity to take it again. If you fail it again, your highest score of the two will determine your placement in courses. If your score is Limited Competence (6), you will be required to take the course option (see below). If your score is Developing Competence (7), you need only take a second-tier course to satisfy the UWSR (see below).

Course (Option Two): ENGL 3000 and ENGL 3001 are the first-tier courses, designed to help students meet the University Writing Skills Requirement. Students who have taken the Writing Skills Test (WST) and have received Limited Competence (6) must take either ENGL 3000 or ENGL 3001 and perhaps a second-tier course as well. If you choose to meet this requirement through class work, you do not have to take the WST, although you may take it at any time after achieving junior status, for a total of two attempts, even when enrolled in a writing skills course. Generally speaking, ENGL 3000 is intended for native speakers of English, while ENGL 3001 is intended for non-native speakers. Based on end-of-course portfolio evaluation scores, at the end of the first-tier course you will be advised as to your next step, which will involve one of the following: you may be found to have met the UWSR requirement altogether; you may be directed to enroll in a second-tier course; or, you may be directed to repeat the first tier course.

Two second-tier courses are currently offered: ENGL 3003, and MKTG 3495. If you passed one of these courses prior to fall 2000, it may not meet the UWSR. For more information on these courses, contact the individual department.

If you have taken the first-tier course three times consecutively and have not passed and have a letter of good faith effort from your most recent first-tier instructor, you may apply to the Senior Director, Undergraduate Studies and General Education for a waiver of the UWSR. If a waiver is granted, your permanent record will note that you were allowed to graduate without having satisfied the UWSR. If you do not satisfy the requirement and do not have a waiver approved, you will not be allowed to graduate. Contact the Office of General Education for information on this waiver (510.885.2941).

If you receive a grade of "D+" or "D" in a second-tier writing course (taken Fall Quarter, 2000 or later), you may appeal to the Senior Director, Undergraduate Studies and General Education, for a waiver of the UWSR. If a waiver is granted, your permanent record will note that you were allowed to graduate without having satisfied the UWSR. If you do not satisfy the requirement and do not have a waiver approved, you will not be allowed to graduate. Contact the Office of General Education for information on this waiver (510.885.2941).

If you have a verified disability and would like to request accommodations to assist you in satisfying this requirement, contact the Accessibility Services in the Library Complex 2440 or call 510.885.3868 (phone/TTY).

For more information on meeting the University Writing Skills Requirement, see the Testing Office website or call 510.885.3661

Transfer Requirements

In general, degree requirements are the same, but special provisions safeguard the programs taken by students at California community colleges and other CSU campuses. If you are a transfer student, the following provisions apply.

1. If you complete G.E. courses approved for transfer to the CSU and they are certified by your California Community College and/or CSU campus (or another campus accepts them and certifies them), Cal State East Bay will accept them to meet the requirements for which they are certified.

According to the Code, CSU cannot accept more than 58 quarter units or 39 semester units. In practice, Cal State East Bay accepts 60 quarter (40 semester) units because our three-course, upper division G.E. program is 12 quarter units. 60 plus 12 totals the 72 units required for G.E.

2. If you complete the Intersegmental General Education Transfer Curriculum (IGETC) and it is certified as being complete by your community college, you have satisfied the entire 60-unit lower division G.E. program and have only the three courses, 12-unit, upper division G.E. program to complete. (The IGETC is an all-or-nothing proposition; there is no partial certification as in #1 above.)
3. If you complete any part or all of the U.S. history, U.S. Constitution, and California state and local government requirement at a California community college or other CSU campus and it is certified, Cal State East Bay will accept that certification for completion for all, or part of, the requirement. Contact either the History department or the Political Science department if you have any questions about this requirement
4. If you successfully completed a course at another university or college that is not certified for the CSU G.E. program, but you believe it meets the criteria listed earlier for a specific requirement, you may request an "exception" on your degree audit. If you believe you have a petitionable course, discuss it with your advisor, with a G.E. advisor in the Academic Advising and Career Education Office, or the G.E. Office. If (s)he agrees, the advisor will submit the exception request for review. After action on your request for an exception, an e-mail to your Horizon account will notify you of the decision.

Likewise, if you believe you have a petitionable course for the U.S. history and government requirement, you may request an exception. In this case, go to either the History department or the Political Science department, whichever is appropriate to the course, and review the issue with the department Chair. (Both departments are in Meiklejohn Hall.) If the Chair agrees, (s)he will approve the exception and note it on your degree audit.

5. Cal State East Bay has articulation agreements for all of our majors with all California community colleges. You may view them online at: <http://www.assist.org>. If you followed one of these major articulation agreements and completed all equivalent lower division work at the community college, your major department will consider your lower division major complete.

If you did not follow an articulation agreement, your major department will evaluate your transfer courses individually for equivalence.

6. The graduation writing proficiency requirement (called the University Writing Skills Requirement at Cal State East Bay) is mandatory on all CSU campuses. Cal State East Bay will accept certification of the graduation writing proficiency requirement from any CSU campus. However, we must have written documentation that the entire requirement was satisfied at the other campus where you were enrolled as a matriculated student. ("Matriculation" means regularly enrolled after being admitted to a university.) You cannot, for example, take a writing proficiency test at another campus to meet the UWSR at Cal State East Bay while you are matriculated at CSUEB.

Although you can complete a sizable portion of your graduation requirements at other colleges and universities, do not forget the residence requirements previously listed. They must be satisfied while matriculated and enrolled at Cal State East Bay.

Multiple Majors

You can pursue two or more majors simultaneously with permission, making sure they differ from each other by a minimum of 18 units.

The disadvantage of completing multiple majors while working on the same degree is that you have to delay graduation until you complete all requirements of all the majors. However, you are checked for completion of the G.E. requirements only once (and the only department excluded from G.E. is your first major, not any additional ones).

In the case of multiple degrees, it is possible for you to pursue additional degrees simultaneously or consecutively. If you complete a second baccalaureate simultaneously with your first baccalaureate, you will not need to take additional residency or General Education units beyond those required for the degree you indicate as your primary baccalaureate.

If you return to complete a second bachelor's after graduating with your first bachelor's from an institution accredited by a regional accrediting association, you are not required to complete any additional GE, graduation requirement, or Code courses. You will only be required to complete courses specifically required to complete your current major, and the University Writing Skills Requirement if you did not satisfy it with your first degree.

If you enroll at CSUEB to complete a second bachelor's after graduating with your first bachelor's from a non-CSU institution, you will have your GE and Code courses evaluated under the appropriate GE catalog and CSUEB GE pattern. In this situation, the 12 units of GE in residence are a requirement for your second baccalaureate. You will be held to the University Writing Skills Requirement.

You cannot get two degrees in the same field. For example, a B.A. with a major in Geology and a B.S. with a major in Geology, or a B.S. with a major in Business Administration (Option in Accounting) and a B.S. with a major in Business Administration (Option in Marketing) are not allowed. (Note: Although you cannot receive two B.S. degrees in Business Administration, you can receive a single B.S. degree in Business Administration with two options.)

Any options and minors completed within your degree will also be recorded on your diploma and permanent record if you request them.

Apply for Graduation

Note: Students are advised to review completion of general education requirements and to consult with their major and minor departments before filing for graduation.

Apply for graduation one term in advance of the intended term of graduation. Students must apply prior to the end of the Late Add period. Deadlines to file are listed on the Important Dates page on the University website under "Current Students". Log into MyCSUEB on the university website (<https://my.csueastbay.edu>) and click on "Apply for Graduation." Students will be prompted to select the term for which they wish to graduate. A confirmation page will appear. Students should print this page and give a copy to the major/minor department. Discontinued students can file for graduation using the "Application for Graduation for Closed Matriculation" form on the University website under "Current Students". Students are responsible for contacting their academic major and minor departments and informing them of their intent to graduate. Students must allow enough notice so that their department will have sufficient time to generate a major or minor checklist sheet indicating whether the student has satisfied all academic requirements of the major or minor. The major and minor check sheets are due to the Office of the Registrar by the end of the fifth week of the quarter preceding the student's final quarter.

The graduation filing fee will be charged to their account after a student files. Students may pay their fee:

- Online at MyCSUEB (<https://my.csueastbay.edu>)
- In person at the Cashiers' Office in the Student Services Building on the Hayward Hills campus
- In person in the Academic Services Office on the Concord Campus

The fee covers the cost of the graduation check, the diploma, and participation in the annual commencement ceremony (but not cap and gown rental/purchase, which is handled separately by the Bookstore). The fee is non-refundable, but if the student does not graduate when they intended, the fee will be transferred to the subsequent quarter, if they choose to update their quarter of graduation.

To register as a graduating senior, students must have earned 150 units or more and have filed for graduation by the time registration appointments are assigned. A student's graduation quarter can be updated by request a maximum of three consecutive

terms, after which time they must re-file and pay again. This should be done well in advance of the opening of registration for a given quarter, and no later than the end of the Late Add period of the quarter originally intended to be the student's final quarter. Changes in the information on the diploma (change of name, address to be sent, deletion of an incomplete minor) must be submitted no later than the end of the Late Add period of the intended quarter of graduation.

After filing for graduation, students must contact their major department to complete an official "Major Check" form showing all requirements completed for the major and those remaining to be completed for the major. (If students are an Interdisciplinary Studies Major, a Major Check is not needed.) The department must submit the form to the Office of the Registrar no later than the fifth week of the quarter preceding the student's final quarter if they are to graduate on time. *Students are strongly encouraged to check with their academic department by the end of the fifth week of classes of their next to last quarter to be certain a major check has been filed.*

If students are completing a minor and want it recorded, they must request that a "Minor Check" form be submitted by the department offering the minor to the Office of the Registrar no later than the end of the fifth week of classes of the student's second to last term.

If students are completing a Single or Multiple Subject Matter Preparation Program for entry into a teaching credential program, be certain that the appropriate check sheet is submitted by the department or program committee offering the program to the Credential Student Service Center in the College of Education and Allied Studies.

If students file any waiver or substitution petitions for major, G.E., or other graduation requirements, they must be certain the substitution petition reaches the Office of the Registrar at least four weeks before the end of their final quarter.

Once students have completed all degree requirements and the Office of the Registrar can verify their completion, their degree will be posted. The final graduation evaluation process typically takes up to three months following the posting of grades from the student's last quarter of attendance. The student's diploma will be ordered and mailed to their permanent address of record with the university 4-6 weeks after the degree has been awarded.

A diploma is an official document containing the embossed seal of Cal State East Bay, the student's name, the degree conferred and date, major(s) completed in the degree conferred, any options or minors completed, type of honors if any, and the signatures of state and university officials. It is not reproducible or available in multiple copies. Students can obtain multiple copies of their record by ordering transcripts which also show degrees, majors, options, minors, and honors, as well as other information. If students need proof of completion of their degree before receiving their diploma, they may order transcripts from the Office of the Registrar. Should a student change their name, they may request that a new diploma be issued with their new name if they: (1) return the originally issued diploma to the Office of the Registrar, (2) provide legal documents confirming their legal name change, and (3) pay the fee for a new diploma.

In order to protect the integrity of its transcripts, the university will not make any changes to student records unless there is documented evidence of university error. Once a degree is posted to a student's permanent record, the diploma and transcript cannot be altered by adding additional options and/or minors, or by grade changes, withdrawals, and/or grade forgiveness. Students who believe that they have received a grade in error should promptly ask the instructor to verify and, if appropriate, correct the grade. If an error was made, the instructor of record must indicate specifically the nature of that error on the Change of Grade form and submit the completed form to the Student Records Office. Students who feel they received a grade due to unfairness would also have one quarter to pursue their allegation of unfairness through the University's fairness complaint process. Students must notify the Office of the Registrar of any errors in their grades no later than the quarter subsequent to the quarter in which their degree is awarded or upon completion of the fairness process. The Registrar's Office may also seek clarification of the error from the Department Chair.

If the instructor is absent from campus during the quarter subsequent to the quarter in which the student's degree is awarded, the student shall promptly consult with the department chair about the grade in question. If the department chair is unable to contact the instructor, the chair will notify the Dean of the College and the University Registrar in writing that an extension of the grade correction deadline, up to one year after the degree has been awarded, has been requested.

Academic Honors

In the undergraduate Grading and Academic Standards chapter, the Dean's and Honors Lists (the annual academic honors recognition) were discussed. Cal State East Bay also recognizes undergraduate students at graduation for consistently high scholarship through their entire academic careers, which includes coursework they may have transferred in from other institutions. *If you graduate from Cal State East Bay during any quarter covered by this catalog, you will qualify for **Graduation with Honors** if your academic record meets the following criteria.*

1. To qualify for any category of honors, you must have a minimum cumulative and Cal State East Bay grade point average of 3.65, and
2. You must have completed at least 60 quarter units of coursework in residence (as defined in the university catalog) at Cal State East Bay.
3. You will qualify for one of these categories of honors at graduation on the basis of the following grade point average in all college work: **3.85-4.00 summa cum laude** (highest honors); **3.75-3.84 magna cum laude** (high honors); **3.65-3.74 cum laude** (honors)

The GPA is officially calculated at the time you have completed your graduation requirements. Therefore, graduation with honors is governed by the catalog in effect at the time of your graduation. The honors designation will be noted on your diploma and official transcript. The conditions noted above apply equally to second-baccalaureate degree candidates. Post-baccalaureate and graduate students are not eligible for university honors.

Graduate Credit

Undergraduate students may apply graduate courses taken during their final quarter of undergraduate attendance to a Cal State East Bay master's degree program. Students can take up to 13 units of courses during their final undergraduate quarter (no earlier) and apply them to their master's degree if they:

- have at least a 2.00 grade point average at Cal State East Bay;
- do not need the units or grade points to complete their baccalaureate degree;
- do not need the units for residence credit in their master's degree; and
- obtain prior permission from the department Chair of the graduate program in which they wish to apply the units.

While an undergraduate, you should obtain and complete a "Petition for Graduate Credit" form, and obtain the signed approval of the graduate department Chair to apply the courses to your master's degree. The form should be filed with Planning, Enrollment Management, and Student Affairs.

You cannot be matriculated in a baccalaureate degree and a master's degree program at the same time, so the units earned in your last undergraduate quarter that are applied to your master's degree are not residence credit in your graduate degree. Most Cal State East Bay master's degrees require 45 units, 32 of which must be in residence. If you take the maximum 13 units for your graduate degree in your last undergraduate quarter, you will have used up your non-residence degree credit and cannot use any transfer, University Extension, or Open University units for your master's degree.

If you start working on a basic Teaching Credential (5000-level courses in Teacher Education) before completing your baccalaureate, and are not already in the Fast-Track Teacher Preparation Program, you may have the units certified for application to your post-baccalaureate requirements. To qualify, the units must be in excess of the units needed for your bachelor's degree or any requirement of that degree. You should submit a written request to Enrollment Management. The request should cite all the courses to be certified for this type of postbaccalaureate credit and should be submitted after completing your baccalaureate degree.

Footnotes

1. Students must complete the "Request for Audit Grade" form available from the Cal State East Bay Student Enrollment Information Center on the first floor of the Student Services and Administration Building on the Hayward Hills campus.

2. Reflects re-centering (recalibration) of SAT tests taken in April 1995 and thereafter. Qualifying scores for SAT tests taken prior to April 1995 that have not been re-centered can be determined by subtracting 100 from the SAT scores shown in the table.

Graduate/Post-Baccalaureate Admission and Degree Information

Graduate and Post-Baccalaureate Admission

Admission to the University

All graduate and post-baccalaureate applicants (e.g., Ed.D., joint Ph.D. and Ed.D. applicants, master's degree applicants, those seeking educational credentials or certificates, and where permitted, and holders of baccalaureate degrees interested in taking courses for personal or professional growth) must file a complete graduate application as described in the graduate and post-baccalaureate admission materials at www.csumentor.edu. Applicants who completed undergraduate degree requirements and graduated the preceding term are also required to complete and submit an application and the \$55 non-refundable application fee. (Note: Applicants seeking a second bachelor's degree should submit an undergraduate application for admission unless specifically requested to do otherwise.) Since applicants for post-baccalaureate programs may be limited to the choice of a single campus on each application, re-routing to alternate campuses or later changes of campus choice are not guaranteed. To be assured of initial consideration by more than one campus, it is necessary to submit separate applications (including fees) to each.

Applications submitted by way of www.csumentor.edu are expected unless submission of an electronic application is impossible.

Graduate and post-baccalaureate applicants may apply for a degree objective, a credential or certificate objective, or where approved, may have no program objective. Depending on the objective, the CSU will consider an application for admission as follows:

General Requirements

The minimum requirements for admission to graduate and post baccalaureate studies at a California State University campus are in accordance with university regulations as well as Title 5, Chapter 1, Sub-chapter 3 of the California Code of Regulations.

Specifically, a student shall at the time of enrollment:

1. have completed a four-year college course of study and hold an acceptable baccalaureate degree from an institution accredited by a regional accrediting association, or shall have completed equivalent academic preparation as determined by appropriate campus authorities; and
2. be in good academic standing at the last college or university attended; and
3. attained a cumulative grade point average of at least 2.5 in an acceptable earned baccalaureate degree, or a grade point average of at least 2.5 in the last 60 semester units (90 quarter units) attempted, or hold an acceptable post-baccalaureate degree earned at a regionally accredited institution;
4. satisfactorily meet the professional, personal, scholastic, and other standards for graduate study, including qualifying examinations, as appropriate campus authorities may prescribe. In unusual circumstances, a campus may make exceptions to these criteria.

Application Filing Periods

The application filing periods for graduate and unclassified post-baccalaureate applicants are listed on Application and Document Deadlines page of the university's website.

Admission to a Graduate Program

Most graduate degree programs at Cal State East Bay also require that an applicant complete a separate departmental application. These programs may require that the student meet additional admission requirements above and beyond those required for admission to the university. Contact the department offering the program to obtain a departmental application form and information on departmental application deadlines and admission requirements. Also the applicant should review the chapter

describing the graduate program in this catalog.

If you wish to pursue a graduate Interdisciplinary Studies Major, contact the Academic Programs and Graduate Studies Student Services Office (Student Services and Administration Building, 1st Floor, 510-885-3286) as soon as possible, preferably before you submit your admission application. You cannot be admitted as an Interdisciplinary Studies Major until your program of study has been approved.

Regularly matriculated students pursuing a state-supported master's degree at CSUEB are not able to be simultaneously enrolled in a CSUEB University Extension degree program. Students interested in pursuing multiple master's degrees should consult the academic department or e-mail gradadmission@csueastbay.edu if unsure of the programs classification. See the Dual Masters section in the Graduate Degree Information Chapter for more information.

For information on changing major, degree, or credential objectives after you have been admitted, see the Change of Educational Objective section in this chapter.

Admission Categories

Students who meet the minimum requirements for graduate and post-baccalaureate studies may be considered for admission in one of the four following categories:

Graduate Classified - To pursue a graduate degree, applicants are required to fulfill all of the professional, personal, scholastic, and other standards, including qualifying examinations, prescribed by the campus; or

Graduate Conditionally Classified - Applicants may be admitted to a graduate degree program in this category if, in the opinion of appropriate campus authority, deficiencies may be remedied by additional preparation; or

Post-Baccalaureate Classified, e.g. admission to an education credential program - Persons wishing to enroll in a credential or certificate program, will be required to satisfy additional professional, personal, scholastic, and other standards, including qualifying examinations, prescribed by the campus; or

Post-Baccalaureate Unclassified - To enroll in undergraduate courses as preparation for advanced degree programs or to enroll in graduate courses for professional or personal growth, applicants must be admitted as post-baccalaureate unclassified students. By meeting the general requirements, applicants are eligible for admission as post-baccalaureate unclassified students. Admission in this status does not constitute admission to, or assurance of consideration for admission to, any graduate degree or credential program (Most CSU campuses, including Cal State East Bay, do not offer admission to unclassified post-baccalaureate students).

(These and other CSU admissions requirements are subject to change as policies are revised and laws are amended. The CSU website, www.calstate.edu, and the CSU admissions portal, www.csumentor.edu, are good sources of the most up-to-date information.)

International Admission Requirements

Cal State East Bay must assess the academic preparation of international students. For this purpose, "international students" include those who hold U.S. temporary visas as students, exchange visitors, and those in other non-immigrant classifications. California residents and U.S. citizens with international transcripts are also classified as "international students" for admission evaluation purposes. Graduate applicants must hold a degree equivalent to a four-year bachelor's degree obtained from a recognized university. You must also have the equivalent of a 2.50 grade point average, or higher, in your last two years of college-level courses.

There are separate requirements for the admission of international students. Verification of your English proficiency (see below), financial resources, and academic performance are all important considerations in your admission.

Application Filing Periods and Deadlines for International Students

The university has established deadlines to ensure that all application materials will be processed in time to allow you to make the necessary passport, visa, travel and other arrangements to reach the campus before the start of the quarter of admission.

Current deadlines applicable to international student admission can be found on the university website or by contacting the International Admissions Office (iao@csueastbay.edu).

Each applicant must have a declared educational objective when the application is filed. International students on F-1 student visas may be admitted as "Conditionally Classified Graduate," "Classified Graduate," or "Classified Post-Baccalaureate" students. They may not be admitted as "Unclassified Post-Baccalaureate" students, unless they have an approved course of study acceptable to the Office of Academic Programs and Graduate Studies.

Note: Some graduate programs may require admission tests such as the GMAT or GRE and a supplemental application. Please consult the individual graduate department for any additional application or admission requirements.

Academic Records

Certificates, diplomas, mark sheets, transcripts, and test scores must be sent directly from the issuing institution to the International Admissions Office to be considered official. The International Admissions Office reserves the right to determine what constitutes an official document. Certified English translations must accompany all non-English original documents. Documents submitted are the property of Cal State East Bay and will not be returned.

English Proficiency Requirement for Post-Baccalaureate and Graduate Applicants

All graduate and post-baccalaureate applicants, regardless of citizenship, whose native language is not English and whose preparatory education was principally in a language other than English, must demonstrate competence in English by presenting one of the following:

TOEFL (Test of English as a Foreign Language)

Graduate: 550 (paper-based); 213 (computer-based); 79 (Internet-based)

IELTS (International English Language Testing System)

Graduate: 6.5

The Masters in Economics program requires applicants to demonstrate English competence by presenting one of the following:

TOEFL (Test of English as a Foreign Language)

Graduate: equivalent to 90 (Internet-based)

IELTS (International English Language Testing System)

Graduate: 7.0

Note: All test scores must be sent directly from the testing institution.

The English proficiency requirement for post-baccalaureate and graduate applicants may be waived by presenting the following: an official transcript showing graduation with a bachelor's degree from a U.S. college or university, or an official transcript from an international college or university indicating English is the principal language of instruction, or an official letter from the college or university certifying that English was the language of instruction.

Financial Certification

International students who wish to apply for a student visa must demonstrate financial support before a letter of admission or an "I-20" or "DS-2019" form will be issued. The following forms must be submitted: I-20 Letter of Consent, Declaration of Finances, Verification of Finances, and Health Insurance Compliance. These forms can be downloaded from the "Apply Online" option on the university website.

Enrollment Requirements for F-1/J-1 Visa Students

If you are a graduate on a student visa, you are required by the U.S. Citizenship and Immigration Services to take a minimum 8 quarter units per quarter that will count towards your degree as a "Graduate" student, a "Classified Post-Baccalaureate" student, or an "Unclassified Post-Baccalaureate" student with an approved course of study. For additional information, see Post-

Baccalaureate Classification in this chapter. Enrollment in courses through Open University in University Extension may not count for visa certification purposes.

International Students should contact the Center for International Education (cie@csueastbay.edu) for information on matters affecting visa status, eligibility for employment, and any special academic requirements for international students.

Transitory Admission Requirements

Graduate students are eligible for Intrasystem Concurrent Enrollment, Intrasystem Visitor Enrollment, and Cross-Registration with the University of California, Berkeley, and selected other East Bay colleges.

Intrasystem Concurrent Enrollment

If you are enrolled at any campus of the California State University, you may apply to attend another campus while concurrently enrolled at your home campus.

Eligibility Requirements: (1) You have completed at least one term at the home campus as a matriculated student, or will be enrolled concurrently in such status, (2) you are, or have been, enrolled in an authorized graduate program at your home campus, and (3) you are in good standing at the last college attended.

Intrasystem Visitor Enrollment

If you are a student of any campus of The California State University, you may apply for admission as a visiting student at another campus for a period of one term.

Eligibility Requirements: (1) You have completed at least one term at the home campus as a matriculated student, (2) you are, or have been, enrolled in an authorized graduate program at the home campus, and (3) you are in good standing at the last college attended.

For additional information on Intrasystem Concurrent Enrollment and Intrasystem Visitor Enrollment, as well as information on the Cross-registration program with the University of California, Berkeley, and selected other East Bay colleges, see "What are the Enrollment Requirements for Transitory (Visiting) Students?" in the Undergraduate Admission and Degree Information chapter.

Fees: Graduate

The California State University is one of the most economical public universities in the nation and Cal State East Bay's fees are among the lowest in the California State University system. Resident students currently pay only 38% of the total cost of their education. If fee revisions occur, they will be published in the Class Schedule. Legal residents of California are not charged tuition, only fees.

The CSU makes every effort to keep student costs to a minimum. Fees listed in published schedules or student accounts may need to be increased when public funding is inadequate. Therefore, CSU must reserve the right, even after initial fee payments are made, to increase or modify any listed fee, without notice, until the date when instruction for a particular semester or quarter has begun. All CSU listed fees should be regarded as estimates that are subject to change upon approval by The Board of Trustees.

Schedule of Graduate and Post-Baccalaureate Registration Fees, 2015-2016

Any student who holds a bachelor's degree, which includes students pursuing a second bachelor's degree, and all categories of graduate and post-baccalaureate students (except qualified students pursuing a teaching credential, see the next section) pay the following fees when registering at Cal State East Bay. (Legal residents of California are not charged tuition.)

Application Fee (non-refundable), payable by check or money order at time application is made: \$55

Graduate/Post-Baccalaureate Registration Fees, Effective Fall 2015 ^{1,2}

	0.1 to 6.0	6.1 or more
Tuition Fee*	\$1,302	\$2,246
Student Body Fee	43	43
Facilities Fee	2	2
University Union Fee	55	55
University Union Recreational Fee	65	65
Instructionally Related Activities Fee	8	8
Health Services Fee	75	75
Athletics Fee	35	35
Academic Excellence Fee	80	80
Photo I.D. Photo I.D. (quarterly fee)	1	1
Total	\$1,666	\$2,610

**Note:* The Tuition Fee for graduate and post-baccalaureate students for the academic year (three quarters) is \$4,998 for 0.1 to 6.0 units a quarter and \$7,830 for 6.1 or more units a quarter.

Graduate Business Professional Fee, 2015-2016

The Graduate Business Professional Fee is charged in addition to the Tuition Fee and campus fees. The per-unit fee of \$169.00 is charged for required courses taken by students who have been admitted and enrolled in one of the following Professional Business Graduate Programs: Master of Business Administration (MBA), MS Business Administration, MS Taxation. The fee is also charged for prerequisite courses taken by students who have an admission status and are enrolled in one of these programs.

Schedule of Education Doctorate Registration Fees, 2015-2016

Students pursuing the Education Doctorate degree pay the following fees when registering at Cal State East Bay. (Legal residents of California are not charged tuition.)

Education Doctorate Registration Fees, Effective Fall 2015 ^{1,2}

	0.1 to 22.0 Units
Tuition Fee*	\$3,706
Student Body Fee	43
Facilities Fee	2

University Union Fee	55
University Union Recreational Fee	65
Instructionally Related Activities Fee	8
Health Services Fee	75
Athletics Fee	35
Academic Excellence Fee	80
Photo I.D. Photo I.D. (quarterly fee)	1
Total	\$4,070

**Note:* The Tuition Fee for Education Doctorate students for Fall 2015 through Summer 2016 is \$16,280 regardless of units. Applicable term fees apply for campuses with special terms, as determined by the campus. Total College Year fees cannot exceed the Academic Year plus Summer Term fees.

For information on how to pay fees, as well as information on other fees (e.g., library fees, individual course fees, test fees, etc.), see the Student Financial Services chapter in this catalog. The Student Financial Services chapter also has information on the policies governing debts owed to CSUEB.

Credit Cards, Cash, Check

You may use credit cards (American Express, Discover, and MasterCard), cash, or check for payment of registration fees. See the current Class Schedule for additional information.

Fees: Credential

Students seeking an initial Multiple Subject, Single Subject, or Special Education teaching credential who have been admitted to a credential program with "classified" or "conditionally classified" status pay the following fees. This fee level will apply whether or not the student is simultaneously enrolled in a master's degree program.

Qualified Teacher Credential Registration Fees, Effective Fall 2015 ^{1,2}

	0.1 to 6.0 Units	6.1 to more Units
Tuition Fee*	\$1,228	\$2,116
Student Body Fee	43	43
Facilities Fee	2	2
University Union Fee	55	55
University Union Recreational Fee	65	65
Instructionally Related Activities Fee	8	8

Health Services Fee	75	75
Athletics Fee	35	35
Academic Excellence Fee	80	80
Photo I.D. Photo I.D. (quarterly fee)	1	1
Total	\$1,592	\$2,480

**Note: The Tuition Fee for qualified teacher credential students for the academic year (three quarters) is \$4,776 for 0.1 to 6.0 units a quarter and \$7,4 for 6.1 or more units a quarter.*

Credit Cards, Cash, Check

You may use credit cards (American Express, Discover, Visa, and MasterCard), cash, or check for payment of registration fees. See the current Class Schedule for additional information.

Residency Determination

The Office of Admission determines residence status of all new and returning students for nonresident tuition purposes. For information on the criteria used in making this determination, as well as residence determination dates, see the Undergraduate Admission and Degree Information chapter in this catalog. (Legal residents of California are not charged tuition, only fees. See the Nonresident Tuition section.)

Nonresident Tuition

Nonresident Tuition (in addition to other fees charged to all students) per unit or fraction thereof is \$248.

Note: The total nonresident tuition paid per quarter will be determined by the number of units taken. Mandatory system wide fees are waived for those individuals who qualify for such exemption under the provisions of the California Education Code (see section on Fee Waivers in the Student Financial Services chapter).

Graduate Education: Defined

The master's degree is awarded for completion of a planned and integrated program of advanced study. It recognizes that a student has mastered a particular field sufficiently to pursue creative or applied projects in that field.

When you complete your graduate degree, you will have acquired a mastery of a particular area of knowledge; an ability to relate that knowledge to knowledge in other disciplines; an ability to deal systematically with the concepts, theory, and principles in new situations; an ability to formulate and deal with problems on an advanced level; methodological, technical, and communication skills essential for advanced study; an ability to undertake independent investigation and research; abilities characteristic of professional performance; and attitudes conducive to continuous intellectual and professional development.

Every master's degree program includes what is termed a capstone experience. This may include a thesis or its equivalent, a comprehensive examination, a specialized internship, a project, or case study report, a musical recital, gallery showing, or other comparable achievement. Your completion of the capstone experience demonstrates that you have successfully integrated the various elements of the graduate learning experience and have gained an in-depth knowledge of your discipline.

Graduate Student: Defined

A student is considered a Graduate Student at Cal State East Bay if they have been admitted to a specific master's degree program as a "Conditionally Classified" or "Classified" student, or to an advanced credential program which can be earned in conjunction with a master's degree. Basic teacher credential programs constitute a separate area of post-baccalaureate work, and students in these programs are defined as "Classified Post-Baccalaureate" students.

Information regarding master's degrees and credentials can be found under the appropriate department's listing in the graduate section of this catalog.

Master's Degree Requirements

A student wishing to earn a master's degree must complete the five requirements listed below:

1. Fulfill the University Writing Skills Requirement;
2. Be Advanced to Candidacy;
3. Complete at least 45 quarter units applicable to your degree (45-52 in the Interdisciplinary Studies Major, 48 in Public Administration, 52-54 in Multimedia, 52-64 in the MBA, 72 in Counseling or Social Work).
 - All units must be earned within the five calendar years immediately preceding the receipt of your degree. (Outdated units may be accepted for one additional year with the approval of your department and the Senior, Academic Programs and Graduate Studies. If not completed in the sixth year, currency in the subject matter of the outdated courses must be demonstrated. Courses older than seven years are only applied to the degree in exceptional circumstances.)
 - A minimum of seventy (70) percent of the total units required by the degree program must be completed in residence while enrolled as an admitted graduate student at Cal State East Bay. (Note: The number of transferable units for each degree program will be rounded to the nearest whole number of units.) Units taken while at other schools, while an undergraduate with permission to take graduate courses, while pursuing an additional baccalaureate degree in "Unclassified Post--Baccalaureate" status, while enrolled in another graduate degree program, or while enrolled in Continuing Education courses-including Open University courses-do not count as resident units. Courses offered in special session are considered resident units. Please note that individual graduate programs may require more than 70 percent of the required degree units in residence, so check your particular program's section of this catalog for these requirements.
 - At least 1/2 of the units in your program must be 6000-level.
 - No lower division units can be counted.
 - No more than 9 units of university thesis or 5 units of departmental thesis or project work can be counted.
 - No more than 15 units may be in CR/NC courses (16 in Public Administration, 24 in Counseling, and 24 in Social Work).
4. Complete a program of study approved by your department, which must include a thesis, project, or comprehensive examination; and
5. Earn a 3.0 grade point average in all units counted towards your degree, with a minimum course grade of "C" in every course. Any course that counts toward your degree requirements with a grade of "C-" or below will have to be repeated. Please note that individual graduate programs may require a higher minimum grade, so students should check your program's section of this catalog for these requirements.

Doctoral Degree Requirements

Cal State East Bay offers one doctoral program, the Ed.D. in Educational Leadership for Social Justice. Students accepted into this Ed.D. program should work very closely with their academic advisors to ensure that all policies and procedures are being followed. Policies and procedures for continuing student performance as well as program graduation requirements for this doctoral program are different from those required for students in master's programs. See the Ed.D. program information in this Catalog or contact the department office or website directly for specific requirements and program information for the Ed.D. degree.

Catalog Rights for Graduation

To meet the five requirements listed in the previous section, you must follow the specifics listed in this catalog. As long as you maintain attendance by enrolling in at least two quarters each calendar year, your degree requirements will remain those in this catalog. However, you may elect to meet the requirements of the catalog in effect at the time you graduate. These principles are called your "catalog rights." If you are absent due to an approved Educational Leave or to attend another accredited institution of higher education, you will not lose your catalog rights as long as you are not away for more than two years. Your catalog rights for your master's degree are governed by the catalog in effect at the time you were admitted to your program. If you break attendance by not enrolling in two quarters in a calendar year, your graduation requirements will be governed by the catalog in effect at the time you reenter.

Please note that requirements of certain programs (e.g., teacher credential programs) are governed by outside agencies. The requirements of these programs are subject to change based on changes dictated by these outside agencies.

University Writing Skills Requirement

All CSU graduates must demonstrate competency in writing prior to receiving a degree by satisfying the University Writing Skills requirement (UWSR). Graduate students can meet this requirement in one of the following ways:

1. If you have previously satisfied the Graduation Writing Assessment Requirement at CSUEB or at another CSU campus, CSUEB will accept official certification of completion if the entire requirement, as specified by that CSU campus, was satisfied and you were a matriculated student at the time.
2. If you have graduated from any one of the CSU campuses; unless it is noted on your transcript that your USWR was not satisfied.
3. If you received an essay score of 4.5 or higher on the GMAT or GRE or an essay score of 53 or higher on the CBEST.
4. If you pass the Writing Skills Test (WST) at CAL STATE East Bay. See WST (Option One) for details.
5. If you pass a first-tier writing course and possibly a second-tier writing course (if needed). See Course (Option Two) for details.

If you have not satisfied the UWSR before you begin your graduate work, you must either take the Writing Skills Test or enroll in a first-tier course by the end of your first quarter in "Conditionally Classified graduate" status. If you do not take the test or course when required, you may have a hold placed on your ability to register and may be dropped from your classes. If you think your writing is competent, you should take the Writing Skills Test. The UWSR must be satisfied before you can be admitted as a "Classified Graduate" student and, consequently, before you can be advanced to candidacy and receive a degree.

WST (Option One): The Writing Skills Test consists of an analytic essay that requires you to demonstrate that you can think and write critically. You must pass the WST and satisfy the UWSR with a score of Clear Competence (old 8) to meet the requirement. If you fail the WST, you have only one opportunity to take it again. If you fail it again, your highest score of the two will determine your placement in courses. If your score is Limited Competence (old 6), you will be required to take the course option (see below). If your score is Developing Competence (old 7), you need only take a second-tier course and pass with a C- (CR) or better to satisfy the UWSR.

Course (Option Two): ENGL 3000 and ENGL 3001 are the first-tier courses, designed to help students meet the University Writing Skills Requirement. Students who have taken the Writing Skills Test (WST) and have received Limited Competence (6) must take this course and perhaps a second-tier course as well. Students who choose to meet this requirement through class work do not ever have to take the WST although you may take it at any time, for a total of two attempts, even when enrolled in a writing skills course. Generally speaking, ENGL 3000 is intended for native speakers of English, while ENGL 3001 is intended for non-native speakers. Based on end-of-course portfolio evaluation scores, at the end of the first-tier course you will be directed as to your next step, which will involve one of the following: You may be found to have met the UWSR requirement altogether, you may be directed to enroll in a second-tier course, or you may be directed to repeat first tier.

Two second-tier courses are currently offered: ENGL 3003, and MKTG 3495 (business majors are required to take this course in the major but may not enroll until they have reached Developing Competence on the WST or passed a first-tier course). If you

passed one of these courses prior to Fall 2000, it may not meet the UWSR. For more information on these courses, contact the individual department.

If you have taken the first-tier course three times consecutively and have not passed and have a letter of good faith effort from your most recent first-tier instructor, you may apply to the Associate Vice President, Academic Programs and Graduate Studies, for a waiver of the UWSR. If a waiver is granted, your permanent record will note that you were allowed to graduate without having satisfied the UWSR. If you do not satisfy the requirement and do not have a waiver approved, you will not be allowed to graduate. Contact the Office of Academic Programs and Graduate Studies for information on this waiver (510.885.3718).

If you receive a grade of "D+" or "D" in a second-tier writing course (taken Fall Quarter, 2000 or later), you may appeal to the Associate Vice President, Academic Programs and Graduate Studies, for a waiver of the UWSR. If a waiver is granted, your permanent record will note that you were allowed to graduate without having satisfied the UWSR. If you do not satisfy the requirement and do not have a waiver approved, you will not be allowed to graduate. Contact the Office of Academic Programs and Graduate Studies for information on this waiver (510.885.3718).

If you have a verified disability and would like to request accommodations to assist you in satisfying this requirement, visit Accessibility Services in Library Complex 2400 or call 510-885-3868 (phone/TTY).

For more information on meeting the University Writing Skills Requirement, see the Testing Office website or call 510-885-3661.

Candidacy

"Candidacy" is a status which recognizes completion of substantial progress towards your degree. A student becomes eligible for Advancement to Candidacy when they:

1. have become a "Classified Graduate" student in good standing;
2. have completed at least 12 quarter units of 6000-level coursework with a minimum 3.0 GPA;
3. have designed a formal program of study approved by your graduate advisor;
4. have fulfilled the University Writing Skills Requirement;
5. have completed other department prerequisites for advancement; and
6. are recommended for Advancement to Candidacy by their academic advisor (subject to approval by the department's graduate coordinator).

Capstone Experiences

The capstone experience of the graduate program will be the successful completion of a thesis, project, or comprehensive examination. The quality of the student's work, including quality of expression, is the major consideration in judging the success of this degree component.

Thesis

A thesis is the written product of a systematic study of a significant issue. In the thesis, the student is expected to identify the issue, state the major assumptions, explain the significance of the project, detail sources for and methods of obtaining data, provide analysis of the data, and offer conclusions. The thesis should demonstrate original critical and independent thinking, appropriate organization and format, and thorough documentation. If the research involves human subjects, the protocols must be approved by the Institutional Review Board (see "Research with Human Subjects" in the Appendix).

Cal State East Bay offers two kinds of master's degree theses, University Thesis (numbered 6910) and Departmental Thesis (numbered 6909). Students required, or electing, to write a thesis must register for a minimum of one unit of either 6909 or 6910 in order to receive credit toward completion of this capstone experience. Students should check with the department for information on the number of units for which they must enroll.

Most criteria are the same for both the Departmental Thesis and the University Thesis.

- The candidate must be a graduate student (i.e., admitted to a master's degree program) to enroll in a thesis course; the academic department may add additional requirements.
- The student's thesis work will be supervised by a departmental committee which must include at least one Cal State East Bay faculty member who is a member of the major department.
- The student may not receive credit for more units of thesis work than allowed by the degree program.
- Each quarter the student will receive a grade of "RP" (Report in Progress) for units earned in 6909 or 6910 until they have completed their thesis; the student will then be given a final grade for the entire course. No "RP" units will be counted towards the degree or in calculating their GPA. If the thesis is not approved within five years of your initial enrollment in a thesis course, the "RP" grade(s) will be changed to "F" or "NC" (depending on the grading pattern of the course).
- Normally a degree candidate will be required to present an oral defense of their thesis.

There are also a few significant differences between the two kinds of theses.

- A Master's degree candidate may not earn more than 9 units for University Thesis, while the maximum for Departmental Thesis is 5 units. Several departments have lower unit requirements, so the student should check the program description in this catalog.
- The format of a University Thesis is established by the Associate Vice President, Academic Programs and Graduate Studies. Since these works are expected to serve as resources for future research, the format is formal. An electronic copy is placed in the Institutional Repository. A Departmental Thesis, on the other hand, is usually not as formal. The Departmental Thesis standards and format are determined by the department, and the thesis is retained by the department.

University Thesis: For information on the steps to follow (the approval process, required format for the structural elements of the thesis, and deadlines) when writing a University Thesis, consult the University Thesis Writing Guide available online at www.csueastbay.edu/thesiswritingguide. If a student has questions concerning the selection of a topic, and/or the procedure to establish a thesis committee and research protocols, they should contact their department advisor or graduate coordinator. If the student has additional questions concerning the formatting and binding of their University Thesis after having read the University Thesis Writing Guide, it is recommended they contact the University Thesis Editor at thesis.editor@csueastbay.edu.

Departmental Thesis: For information about a Departmental Thesis (the department's thesis guidelines, including format, acceptable thesis topics, and procedures to establish a thesis committee) contact the department advisor or graduate coordinator.

Project

A project is a significant piece of non-written work in either a fine or applied art or a professional field. Projects should provide evidence of originality, independent thinking, and appropriate form and organization. Students are required to describe their project in a written abstract that addresses the project's significance, objectives, methodology, and conclusions. In some cases, the student may be required to present an oral defense.

Specific criteria for a Project (numbered 6899) are the same as those for a Departmental Thesis with a few exceptions.

- An "RP" grade in a project course will become an "F" (no "NC" option) after one year if your project is not completed.
- While the project need not be considered a research resource, it should be of a caliber to constitute a valid terminal activity in a master's degree program and will be permitted only when a thesis is not appropriate.

If a Master's degree student changes from a program requiring a thesis to one requiring a project (or vice versa), they may count a combined maximum of 9 units for 6909, 6910, and 6899 towards the degree.

Comprehensive Examination

A comprehensive examination is intended to assess the student's mastery of relevant subject matter, their ability to analyze and integrate the knowledge of their field, their skill in critical and independent thinking, and their use of appropriate organization and accurate documentation. A record of the student's examination (questions and responses) will be retained by their department. Some departments grant unit credit for exam preparation while others do not.

Graduate Study Completion

If you have completed all the units required for your master's degree, but are still working on your thesis, project, or studying for a comprehensive exam, you can have continued access to university facilities by registering for GS 6990 Graduate Study Completion, through University Extension, Continuing and International Education. This is a 1-unit course with a fee of \$78 (fee subject to change). The other alternative is to register for 0.1 units through the regular registration process at a cost of approximately \$1164. Registering for GS 6990 will provide you with a valid Student ID card, the ability to check books out of the library, remote access to computerized databases in the library, use of computer labs on campus, the ability to continue to work on projects in science labs, eligibility to purchase a parking permit, and access to other benefits enjoyed by regularly registered students.

Note: GS 6990 cannot be used to satisfy any unit or course requirements for your degree.

You can register by picking up a "GS 6990 Graduate Study Completion Form" in your department or in the University Extension Office in SA 1700. You will need to obtain a signature from your major department.

Policies and Procedures

Registration

Master's degree students must follow the same registration policies and procedures as required for undergraduate students. (See the Registration chapter for details.)

Registration procedures for Thesis or Project courses are slightly different. Master's students must complete a "Special Registration Petition" for each quarter they wish to enroll in one of these courses. The petition should be submitted to the department office. This must be done no later than the last day of the Late Add period. The student is responsible for checking on the progress of this procedure.

Prerequisites: See "What information do students need to enroll in classes?" in the Registration chapter.

Grading

It is an integral part of the teaching responsibility of the faculty to provide careful evaluation and timely assignment of an appropriate grade to each enrolled student. There is a presumption that grades assigned are correct. It is the responsibility of anyone appealing an assigned grade to demonstrate otherwise. In the absence of compelling reasons, such as instructor or clerical error, prejudice, or capriciousness, the grade determined by the instructor of record will be considered final.

For purposes of correcting an error, an instructor may change a grade with approval of his/her department chair and college dean. No grade may be changed once a student's graduation has been recorded. The administrative symbol for withdrawal cannot be assigned by a faculty member. See "What changes can students make in their enrollment status?" in the Registration chapter for a description of withdrawal policies and procedures.

The grading symbols used for graduate courses are as follows:

Academic Grades	Standard of Work Represented	Grade (Quality) Points
A	Superior	4.0
A-	Superior	3.7
B+	Adequate	3.3

Academic Grades	Standard of Work Represented	Grade (Quality) Points
B	Adequate	3.0
B-	Adequate ³	2.7
C+	Substandard	2.3
C	Substandard	2.0
C-	Substandard	1.7
D+	Unacceptable	1.3
D	Unacceptable	1.0
F	Failing	0
CR ⁴	Credit	0
NC ⁴	No Credit	0

Administrative Grades Symbols ⁵	Definitions	Grade (Quality) Points Earned
RP	Report in Progress	0.0
I	Incomplete (Authorized)	0.0
IC	Incomplete Charged	0.0
RD	Report Delayed	0.0
W	Withdrawal	0.0

Administrative Grades Symbols	Definitions	Grade (Quality) Points Earned
WU	Withdrawal Unauthorized	0.0
AU	Audit	0.0

Academic Grades: The typical grading pattern for courses you will take is "A-F"; the use of "+" and "-" is at the discretion of each instructor. Some departments do not allow "C" or "D" grades to be applied towards a master's degree; check with the academic department about its policy. A student may use courses taken on a "CR/NC" basis to meet the degree requirements only if the courses are offered exclusively on that basis. Typically, these courses are restricted to fieldwork and internships and a "CR" grade indicates that the student's work is at least of "B-" quality. In no case, however, may more than 15 units of the master's degree work be earned with "CR" grades in the standard 45-unit master's degree program. In post-baccalaureate (5000-level) courses, a "CR" grade also indicates that the work is at least of "B-" quality.

Administrative Grades: A student may also receive the administrative grades indicated above. It is important that students observe the differences among them. As noted in the Capstone Experiences section the Report in Progress grade ("RP") is used in courses when assigned work extends beyond one quarter. It indicates that work is in progress and has been evaluated and found satisfactory to date, but that assignment of a precise grade must await completion of additional work. A student cannot enroll in more units of RP-graded courses than are applicable to your degree. An "RP" in a thesis course becomes an "F" or an "NC" if the work is not completed in five years; an "RP" grade in any other course becomes an "F" or an "NC" after one year.

The Incomplete (Authorized) grade ("I") is used to indicate that (1) a discrete portion of the required coursework has not been completed and evaluated in the prescribed time period due to unforeseen but fully justified reasons, (2) attending a future offering of the class is not required to complete the work, and (3) the instructor believes it likely that the student will earn credit for the course upon completion of that work. An "I" must normally be made up within one calendar year immediately following the end of the term during which it was assigned. This limitation prevails whether or not the student maintains continuous enrollment. If the student receives an "I" and does not complete the work within the period specified by the instructor (in no case to exceed one year), the grade will be changed to an "IC" or "NC," depending on the grading pattern in which the student enrolled. (An extension may be granted by the department if military service or serious health or personal problems prevent the student from completing the work, or if the professor is away on leave during the quarter of expiration. Such extensions are for one quarter only, up to a maximum of two extensions, and must be approved by the instructor and the department chair.) The Request for Extension of Incomplete Grade form must be submitted to the Office of the Registrar before the end of the term in which the grade will lapse.

An Incomplete Charged ("IC") is used when the student receives an authorized incomplete ("I"), but does not complete the required coursework within the allowed time, and the original grading pattern of the course was "A-F." The "IC" replaces the "I" and is counted as a failing grade for computing their grade point average. The student may be able to receive up to two one-quarter extensions from the instructor. These extensions are for cause and must be approved by both the instructor and department chair. (Examples of cause include military service, serious health or personal problems, or instructor's leave of absence.) If the student wants credit for a course after an "I" has been converted to an "IC," they must re-register and pass the course.

A student can graduate with an "I" grade on their record if the course is not necessary for graduation. Remember that no grade may be changed once graduation has been posted

A Withdrawal Unauthorized ("WU") indicates that the student enrolled in a course, but did not withdraw from the course and also failed to complete course requirements. It is used when, in the opinion of the instructor, completed assignments or course activities, or both, were insufficient to make normal evaluation of academic performance possible. The "WU" is counted in your grade point average as an "F" grade.

The Report Delayed grade ("RD") is rarely used, and will be assigned by the Registrar only if grade reports are delayed by circumstances beyond the student's control, such as their instructor's illness.

A student may drop a course at any time during the first two weeks of instruction. (For Drop procedures, see the Class Schedule.) No mention of a dropped course appears on the student's permanent record. After the first two weeks of the quarter, students may Withdraw from a course, and a "W" grade will be assigned if the reason for their request to withdraw from the course is due to circumstances beyond the student's control and they have obtained the appropriate approvals. This grade carries no connotation as to the quality of the work and is not included in GPA calculations. Under extreme circumstances the student may decide that they must withdraw from all their courses. If the student believes this may be necessary, they must contact their graduate advisor or department chair as soon as possible for advice on the appropriate procedures to follow. (See What changes can students make in their enrollment status? in the Registration chapter and "What are the administrative grading symbols, and what do they signify?" in the undergraduate Grading and Academic Standards chapter for additional information on withdrawal procedures.)

Grade Point Average (GPA): The student's grade point average (GPA) is calculated by dividing the total number of quality hours (units attempted, excluding CR/NC courses) into the number of grade (quality) points earned. If they repeat a course required in the major, their department has the discretion, under specific circumstances, not to include an earlier attempt in the GPA calculation. The approval not to include the earlier attempt in the student's degree program must be submitted by their department to the Office of the Registrar. This may be done at any time while a student is enrolled in the degree program, but may not be done after they have been awarded their degree.

The graduate program coordinator or department chair also has the discretion to request that grades in courses that do not count towards graduate degree requirements be excluded from a student's GPA calculation. This will be permitted only if those grades result in the student being placed on academic probation. These may include courses taken in a second baccalaureate program, or courses taken in a different graduate degree program. They may not be courses taken in the degree program that the student subsequently elects not to count toward graduate program requirements. They also may not include grades for courses that the student used for a conferred post-baccalaureate degree. The request not to include a grade in a student's GPA calculation must be submitted by the graduate coordinator or department chair to the Office of Academic Programs and Graduate Studies which will make the final determination of the request. This may be done at any time while a student is in the degree program, but may not be done after they have been awarded their degree.

If the student's GPA falls below 3.00, they should consult immediately with the graduate coordinator or major department chair.

Final Examinations: The student can expect the instructors to provide comprehensive course requirement information for each course at the beginning of the quarter. This will include the work that is expected of the student and the basis on which the student will be evaluated. Most courses have graded assignments throughout the quarter and a final examination or paper. The university's policy states that final examinations must be given only at the times published in the Class Schedule. The purpose of this policy is to ensure fairness for all students. Exceptions are, therefore, rare and must be approved in writing by the department chair. A student should contact the department chair or college dean if they believe this policy is not being followed. If the student is in a course which has a separate laboratory, activity or discussion section, the instructor is permitted to give a separate final examination (but only for that section) during the last regularly scheduled meeting of the section.

Probation and Disqualification: There are two types of probation and disqualification: (1) academic, and (2) administrative. If a student is an "Unclassified Post-Baccalaureate" student, that is not in a master's degree or credential program, all of the following policies apply except that the minimum GPA requirement is 2.50 instead of 3.00.

Academic Probation

Students must maintain a 3.00 GPA in all units attempted after admission to their graduate program, including all prerequisite courses, to remain in good standing. If the student's GPA falls below 3.00, they will be placed on Academic Probation. (Grades in any coursework taken after admission to the student's master's program at CSUEB will count towards the GPA calculation for academic probation.) Should this happen, the student must consult with their graduate advisor prior to registering for the next quarter. The student is also encouraged to take advantage of various university services (such as advising and tutoring) designed to assist them.

Academic Disqualification

A student may be subject to academic disqualification by the Senior Director, Academic Programs and Graduate Studies if during

any quarter while on probation they do not achieve the minimum 3.0 GPA in all units taken after admission to their graduate program. The student may also be disqualified if, at any time, they do not meet the academic criteria of their department. In addition, an appropriate campus administrator may disqualify a student who at any time during enrollment has demonstrated behavior so contrary to the standards of the profession for which the student is preparing as to render him/her unfit for the profession. In such cases, disqualification will occur immediately upon notice to the student.

Administrative Academic Probation

A student may be placed on Administrative Probation if they:

- withdraw from all courses for two consecutive quarters or any three quarters;
- do not progress towards their degree while enrolled (such as earning a number of "NC" grades);
- do not comply with appropriate academic requirements (such as taking the Writing Skills Test); or
- earn only "IC," "F," "WU," and/or "NC" grades for two consecutive, or any three quarters.

Administrative Academic Disqualification

A student will be administratively disqualified if they:

- do not meet the conditions for removal of their Administrative Probation;
- are placed on Administrative Probation twice for the same reason;
- are placed on Academic Probation while on Administrative Probation.

Reinstatement to a Graduate Program

If a student is disqualified, either academically or administratively, they may apply for reinstatement to their graduate program by completing a "Petition for Graduate Reinstatement." The petition must be approved by your Graduate Coordinator or the department chair. Reinstatement will be approved only if the student is able to provide compelling evidence of their ability to complete their degree. Then it will be forwarded for consideration to the Senior Director, Academic Programs and Graduate Studies who has final authority to approve reinstatement. If a student should become disqualified a second time, their reinstatement will normally not be considered. Reinstatement petitions are available on the Office of Graduate Studies web site.

Declassification from a Degree Program: A student may be declassified (dropped) from a graduate degree or credential program for a range of reasons, including, but not restricted to, unprofessional conduct; behavioral issues that interfere with the learning of others; failure to make progress toward the degree or program as set forth by the University and program policies; failure to meet grade requirements to maintain good standing in the program and/or University; and/or the department/program faculty determine that the student is incapable of completing degree requirements at the level expected of a graduate student in the discipline even if the GPA is above a 3.0.

The declassification request must be initiated by the major department with support from the department/program chair and college dean or designee. Requests are submitted to the Office of Academic Programs and Graduate Studies for final action and official notification to the student and the Registrar's Office. The Office of Academic Programs and Graduate Studies will also determine if the student should also be academically or administratively disqualified from the University. If the student is not disqualified from the University and wishes to continue in the University, a declassified student must formally apply to another graduate program or apply as a second baccalaureate student. (Second baccalaureate status is closed for budget reasons until further notice.) Declassified students will not be permitted to enroll through regular University or Open University in any undergraduate or graduate courses in the program or degree from which they were declassified. Unless the declassification was related to conduct issues that interfere with campus interactions, declassified students are eligible to apply to a new program and be accepted as a student by the department/program. The student must be accepted to a new program no later than three quarters after being declassified; otherwise, the student must reapply to the University.

Resolution of Disputes

If a student believes they have received an inappropriate grade or have been treated in an unfair way and they cannot resolve the matter informally with the instructor and department chair, the student should present their case to the Presidential Appointee to the Grade Appeal and Academic Grievance Committee (Academic Programs and Graduate Studies; Tel. 510-885-3716), no later than one quarter after the disputed grade was recorded. The Grade Appeal Committee may authorize a change of grade under certain circumstances (see the Grading and Academic Standards chapter). If the instructor of record does not assign a grade to an individual student, the appropriate failing grade for nonattendance ("WU" or "NC") is automatically recorded by Enrollment Management. A student may petition the Grade Appeal Committee if they believe the instructor should have assigned an

academic grade. For additional information, see "What recourse do students have if they believe they have received a grade that is inappropriate?" in the Grading and Academic Standards chapter.

Honors

Because graduate students constitute a select group whose members do very well in their programs, there are no academic honors conferred at graduation, and no dean's list recognition as is the case for undergraduates.

Post-Baccalaureate Classification

A student will be classified a full- or part-time student according to the following criteria:

- Full-time enrollment for a "Graduate" or "Classified Post-Baccalaureate" student is 8 or more units. A student is considered to be a part-time student if they are enrolled for fewer than 8 units.
- Full-time enrollment for an "Unclassified Post-Baccalaureate" student (i.e., not enrolled in a master's degree program), is 12 or more units.
- If a student is receiving financial aid or benefits from other programs (e.g., Veterans Administration or State Department of Vocational Rehabilitation), they may be subject to specific enrollment requirements to maintain your eligibility. The student should check directly with the source of their benefits.
- If the student is an international student on a non-immigrant visa, the U.S. Immigration and Naturalization Service (INS) requires that the student pursue a full-time course of study in a specific program. The student is expected to complete 8 units per quarter and 24 per year.

Also see "Academic Load" under "What information do students need to enroll in classes?" in the Registration chapter.

Credit for Transferred Courses

If a student has earned credit at another institution which they wish to apply to a graduate program at Cal State East Bay, they may transfer up to 13 quarter units. (However, this number may be reduced if the student has other non-residence credit they wish to apply to their degree.) To request transfer credit:

1. The student must have taken the course after earning a bachelor's degree;
2. Their department must accept the course(s) as relevant to their degree program;
3. The institution at which the student took the course must customarily grant the level of credit for the course (graduate or upper division) that the student wishes to receive for it at Cal State East Bay;
4. The student must have taken the course within five calendar years immediately preceding the receipt of their degree.

A student may also apply units earned through the CSU International Programs that meet the criteria outlined above. No more than half of the 45 units required for the degree may be earned in this manner. If a student also wishes to apply transfer credits to their degree, the total of the transfer and International Program units may not exceed one-half of those required for the degree. If a student completes their capstone experience (thesis, project, or comprehensive examination) while in the International Programs, this must be done under the supervision of at least one Cal State East Bay faculty member.

Also see "Credit for Non-Collegiate Instruction" in the Registration chapter.

In general, Cal State East Bay does not allow the use of credit-by-examination from challenged courses for master's degree requirements. Exceptions may be established by individual departments and must be noted in the degree description in the *University Catalog*. They are governed by the following policies:

- The student must pass the exam challenging the course with a grade of "B-" or better;
- Not more than 13 units of credit-by-examination may be applied to your degree; and
- Challenged courses may not be credited to the residency requirement of your degree.

Change of Educational Objective

If the student is a continuing post-baccalaureate student wishing to change their degree objective or credential program, or they wish to change from "Unclassified" status to a graduate degree or credential program, the student must file a "Change of Graduate Objective" form with the Office of Graduate Admissions. Forms are available from, and should be submitted to the Student Enrollment Information Center (Student Services and Administration Building on the Hayward Hills campus), the Office of Graduate Admissions, or to the Academic Services Office at the Concord Campus.

Dual Master's Degrees

If a student wishes to pursue two master's degrees at the same time, they should indicate this on their application or "Change of Graduate Objective" form filed with the Office of Graduate Admissions:

1. Note that a student must fulfill all prerequisites and requirements for each degree (up to 13 units from the first degree may be applied to the second degree if agreed to by the second degree program); and
2. The student must earn all units for each master's degree within the five calendar years immediately preceding the receipt of each degree.

If both degrees are in the same field (e.g., business administration), the degrees must each be earned in a different option and all 45 or more units must be from different courses.

Second Master's Degrees

If a student already has a master's degree and wants to pursue a second master's degree, they must meet the following criteria:

1. The student must apply and gain admission to the department offering the second master's degree program;
2. The student must fulfill all prerequisites and requirements for the second degree;
3. The student completes at least 32 units (32-39 in the Special Major, 35 in Public Administration, 39-41 in Multimedia, 59 in Counseling) in the second degree. Up to 13 units from the first degree may be applied to the second degree if accepted by the second degree program;
4. The student must earn all units for the second master's degree within the five calendar years immediately preceding the receipt of the degree.

If the second degree is in the same field as your first degree (e.g., business administration), the second degree must be in a different option and all 45 or more units must be from different courses.

Applying for Graduation

Students are advised to review completion of degree requirements with their department before filing for graduation.

Students must apply for graduation one term in advance of the term in which they intend to graduate. Students must apply prior to the end of the Late Add period. Deadlines to file are listed under Important Dates on the University website under "Current Students". Continuing students can log into MyCSUEB on the university website (<https://my.csueastbay.edu>) and click on "Apply for Graduation." The student will be prompted to select the term for which they wish to graduate. There will only be one term to select since graduation applications are only accepted for one quarter at a time. A confirmation page will then appear. The student should print this page and give a copy to their department. Discontinued students can file for graduation using the "Application for Graduation for Closed Matriculation" form on the University website under "Current Students".

The graduation filing fee will be charged to the student's account after they file for graduation. The fee can be paid by one of the following ways:

- online at MyCSUEB (<https://my.csueastbay.edu>)

- in person at the Cashiers' Office in the Student Enrollment Information Center (Student Services and Administration Building, 1st Floor) on the Hayward Hills Campus
- in person in the Academic Services Office on the Concord Campus

The Graduation Application Fee covers the cost of the graduation check of coursework completed the diploma, and participation in the annual commencement ceremony (but not including cap and gown rental/purchase, handled separately by the Bookstore). The fee is non-refundable, but if a student does not graduate when they originally intended, the fee will be transferred to the subsequent quarter automatically.

When a student files for graduation, they may obtain a new registration priority. To register for classes as a graduating graduate student, students must be a "Classified Graduate" who is recommended for Advancement to Candidacy by their advisor and who has made substantial progress towards their degree by the time the registration appointments are assigned.

If a student is completing an undergraduate Single Subject Matter Preparation Program for entry into a teaching credential program, or they are completing a graduate Single or Multiple Subject Credential Program, they should not file for graduation, but be certain that the appropriate check sheet is submitted by the department or program committee offering the program to the Credential Student Service Center in the College of Education and Allied Studies.

After a student has completed all degree requirements and the graduation evaluator has verified their completion, their degree will be conferred and their diploma will be ordered. The final graduation evaluation process typically takes up to three months following the posting of grades from the student's last quarter of graduation candidacy. The diploma will be mailed to the student's address of record with the university 4-6 weeks after the degree has been awarded.

A diploma is an official document containing the embossed seal of Cal State East Bay, the student's name, the degree conferred and date, major(s) completed in the degree conferred, any options or minors completed, and the signatures of state and university officials. It is not reproducible or available in multiple copies. Students can obtain multiple copies of their record by ordering transcripts which also show degrees, majors and options, as well as other information. If a student needs proof of completion of their degree before receiving their diploma, they may request a verification of graduation or a transcript from the Office of the Registrar. Should a student change their name, they may request that a new diploma be issued with their new name if (1) they return the originally issued diploma to the Office of the Registrar (2) they provide legal documents confirming their legal name change, and (3) the student pays the fee for a new diploma.

After the degree is posted to a student's permanent record, a student's diploma and transcript cannot be altered by adding additional options, or by grade changes, and/or withdrawals. The University protects the integrity of its transcripts and will not rewrite history unless a University error has occurred.

Doctorate Information

For information regarding the Doctor of Education, please see the Educational Leadership chapter in the graduate section of this catalog. A copy of the Doctoral Student Handbook may be requested from the Department of Educational Leadership, Dr. Jose Lopez, Doctoral Program Director, Arts & Education Building, Room 250, Tel: 510-885-4145; email: edld@csueastbay.edu. Department web site: <http://www20.csueastbay.edu/ceas/departments/el/>.

Footnotes

1. *Fee adjustments subject to the policies established in Executive Order 661.*
2. **Disclaimer - Cost of Collection: Unpaid Tuition and Fees.** You are subject to normal collection actions for unpaid debts including: assessment of late registration and past due fees, withholding of University services, withholding of credit for and disenrollment from some or all classes, referral of the debt to a collection agency and/or credit reporting agency, intercept of amounts due you from the State of California and/or legal action. You are obligated to pay all costs of collection, including attorney fees, collection agency fees and court costs (Please see Title 5, California Code of Regulations, Sections 42380 and 42381).

3. Note that a "B-" grade, though described as "adequate," generates fewer than 3.0 grade (quality) points and must be balanced by a grade of "B+" or higher.
4. These grades cannot be selected by students. They are only available in graduate courses offered exclusively on a "Credit/No Credit" basis.
5. For definitions of administrative grades, see "What are the administrative grading symbols, and what do they signify?" in the Grading and Academic Standards chapter.

Programs of Study

Cal State East Bay offers a vigorous academic course of study with a real-world curriculum to prepare students for a lifetime of personal achievement and career success.

The University Catalog Programs of Study lists the program, course names, numbers, descriptions, and degree, minor, credential and certificate requirements. See the College and Department Information chapter for detailed information about each college and the academic department including program descriptions, outcomes, faculty information and career opportunities.

Programs ordered by type below: Bachelor, Minor, Master, Doctoral, Certificate, Credential, Bachelor/Credential, Single Subject Preparation, Other Programs of CSU.

Bachelor

Anthropology, Archaeology/Biological Anthropology Option, B.A.

Program Description

Anthropology is the multifaceted study of humanity from an evolutionary, historical, and global perspective. Students in anthropology learn about their own culture as well as those of other peoples as they are shaped by biological evolution, ecological constraints, political history, and sociological conditioning. The Department of Anthropology offers ethnographic, theoretical and methodological courses in five sub-disciplines: biological anthropology, prehistory and archaeology, anthropological linguistics, sociocultural anthropology, and applied anthropology. Regional courses on major populations of the world, especially the heritage cultures of North and South America, and Asia, form an important component of the curriculum. The B.A. degree program bridges the sciences, social sciences, and humanities, preparing students for multidimensional careers. Fundamentally, the study of anthropology cultivates an appreciation of what all humans share, as well as how humans differ across time and space. At the undergraduate level, students in the B.A. degree program may choose to focus on special interests in two combined sub-disciplines:

- Archaeology and Biological Anthropology emphasize the study of human biology, variation, evolution, and the reconstruction of past ways of life and cultural systems from material remains.
 - Socio-Cultural and Applied Anthropology emphasize the study of social and cultural systems of more recent historical and contemporary populations, and the application of anthropological insights into present-day problems.
- Other combinations are possible upon consultation with, and approval by, the faculty.

Student Learning Outcomes

Students graduating with a B.A in Anthropology from Cal State East Bay will be able to:

1. identify, summarize and sequence the basic schools of anthropological thought in all four academic sub-fields of the discipline;
2. apply basic qualitative and quantitative sociocultural (ethnographic), archaeological, or osteological research methods and skills;
3. describe, compare and relate human cultures across different regions of the globe;
4. examine human diversity holistically and scientifically, discriminating among and analyzing conceptions and misconceptions of ethnicity, "race," and human biological variation;
5. identify pragmatic uses of anthropological methods and perspectives in approaching real-world solutions, and identify instances of and opportunities for applications of anthropological tools and ideas in employment and community development, both locally and globally, and
6. communicate information clearly in written and oral forms.

Career Opportunities

- Anthropologist
- Archaeologist
- Artifacts Conservator
- Curator
- Ethnologist
- Foreign Service Officer
- Immigration Service Official

- International Aid Agencies Official
- International Business Employee
- Multicultural Education Instructor
- Museum Curator
- Park Ranger
- Park Service Official
- Professor/Teacher
- Refugee Worker
- Researcher
- Social Science Teacher
- Social Worker
- Travel Consultant
- Urban Planner

Features

The Department administers the Clarence E. Smith Museum of Anthropology, located on the fourth floor of Meiklejohn Hall. The museum houses a sizable collection of archaeological artifacts recovered in Alameda and Contra Costa Counties, as well as ethnographic specimens from cultural groups throughout the world. The museum is an instructional facility for museum curating, research, design, and exhibits. Museum exhibits and special events are open to the public free of charge. For information, call (510) 885-7414 or (510) 885-3104.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation. The major consists of 60-61 units; the B.A. requires a total of 180 units.

Required Courses (60-61 units)

1. Lower Division (12 units)

- ANTH 1100 - Introduction to Biological Anthropology *Units: 4*
- ANTH 1200 - Introduction to Archaeology *Units: 4*
- ANTH 1300 - Introduction to Cultural Anthropology *Units: 4*
or ANTH 3000 Anthropology in the Modern World may be substituted on approval of an advisor and the department chair.

2. Upper Division (48-49 units)

A. (28 units)

- ANTH 3100 - Human Evolution I *Units: 4*
- ANTH 3200 - Science in Archaeology *Units: 4*
- ANTH 3400 - Social Anthropology *Units: 4*
- ANTH 3710 - Anthropology and Museums *Units: 4*
- ANTH 3785 - Anthropology in Action *Units: 4*
- ANTH 3800 - Language and Culture *Units: 4*

B. (4 units)

Regional Studies Electives. Choose one course from the following:

- ANTH 3500 - North American Indians *Units: 4*
- ANTH 3545 - China *Units: 4*
- ANTH 3550 - Japan *Units: 4*
- ANTH 3580 - Middle East *Units: 4*

C. Choose one of the two offered options (16-17 units)

Four additional courses are required:

Archaeology/Biological Anthropology Option (16 units)

Required (12 units)

- ANTH 4240 - Data Analysis in Archaeology *Units: 4*
- ANTH 4250 - Field Course in Archaeology *Units: 5*
- ANTH 4260 - Human Osteology Laboratory *Units: 3*

Electives (4 units)

Choose one of the following:

- ANTH 3101 - Human Evolution II *Units: 4*
- ANTH 3110 - Primate Social Behavior *Units: 4*
- ANTH 3250 - Precolumbian America: Aztec, Inca, Maya *Units: 4*

Highly Recommended Courses in Supporting Fields

It is highly recommended that majors refine their skills in one or more supporting disciplines depending on their academic interests and long-term career/educational goals. When possible, they should satisfy their G.E. requirements from the courses listed below. In addition, students intending to pursue graduate work and who cannot yet demonstrate competence in a foreign language through testing are urged to elect or add modern language courses. A faculty advisor will assist students in making choices from the following list:

- BIOL 1001 - Introduction to Biology *Units: 4*
or
- BIOL 1005 - How Things Work: The Human Body *Units: 4*
- BIOL 1002 - Introduction to Biology Lab *Units: 1*
- GEOL 2101 - Physical Geology *Units: 5*
- HIST 3017 - The Twentieth Century *Units: 4*
- SOC 3411 - Sociology of Gender *Units: 4*
- STAT 1000 - Elements of Probability and Statistics *Units: 5*
- STAT 3010 - Statistical Methods in the Social Sciences *Units: 4*
- Three consecutive quarters of a single modern language.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Anthropology, Socio-Cultural Anthropology Option, B.A.

Program Description

Anthropology is the multifaceted study of humanity from an evolutionary, historical, and global perspective. Students in anthropology learn about their own culture as well as those of other peoples as they are shaped by biological evolution, ecological constraints, political history, and sociological conditioning. The Department of Anthropology offers ethnographic, theoretical and methodological courses in five sub-disciplines: biological anthropology, prehistory and archaeology, anthropological linguistics, sociocultural anthropology, and applied anthropology. Regional courses on major populations of the world, especially the heritage cultures of North and South America, and Asia, form an important component of the curriculum. The B.A. degree program bridges the sciences, social sciences, and humanities, preparing students for multidimensional careers. Fundamentally, the study of anthropology cultivates an appreciation of what all humans share, as well as how humans differ across time and space. At the undergraduate level, students in the B.A. degree program may choose to focus on special interests in two combined sub-disciplines:

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- Other combinations are possible upon consultation with, and approval by, the faculty.

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Students graduating with a B.A in Anthropology from Cal State East Bay will be able to:

1. identify, summarize and sequence the basic schools of anthropological thought in all four academic sub-fields of the discipline;
2. apply basic qualitative and quantitative sociocultural (ethnographic), archaeological, or osteological research methods and skills;
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- Refugee Worker
- Researcher
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- ANTH 1300 - Introduction to Cultural Anthropology *Units: 4*
or ANTH 3000 Anthropology in the Modern World may be substituted on approval of an advisor and the department chair.

2. Upper Division (48-49 units)

A. (28 units)

- ANTH 3100 - Human Evolution I *Units: 4*
- ANTH 3200 - Science in Archaeology *Units: 4*
- ANTH 3400 - Social Anthropology *Units: 4*
- ANTH 3710 - Anthropology and Museums *Units: 4*
- ANTH 3785 - Anthropology in Action *Units: 4*
- ANTH 3800 - Language and Culture *Units: 4*

B. (4 units)

Regional Studies Electives. Choose one course from the following:

- ANTH 3500 - North American Indians *Units: 4*
- ANTH 3545 - China *Units: 4*
- ANTH 3550 - Japan *Units: 4*
- ANTH 3580 - Middle East *Units: 4*

C. Choose one of the two offered options (16-17 units)

Four additional courses are required:

Anthropology, Socio-Cultural Anthropology Option (17 units)

- ANTH 4310 - Field Course in Ethnography *Units: 5*
- One additional regional course from the 3500 series

Any two of the following:

- ANTH 3110 - Primate Social Behavior *Units: 4*
- ANTH 3410 - Folklore *Units: 4*
- ANTH 3720 - Medical Anthropology *Units: 4*
- ANTH 3745 - Human Sexuality: Anthropological Perspectives *Units: 4*
- ANTH 3750 - Women in Cross-Cultural Perspective *Units: 4*
- ANTH 3840 - Folk Religion and Magic *Units: 4*

Highly Recommended Courses in Supporting Fields

It is highly recommended that majors refine their skills in one or more supporting disciplines depending on their academic interests and long-term career/educational goals. When possible, they should satisfy their G.E. requirements from the courses listed below. In addition, students intending to pursue graduate work and who cannot yet demonstrate competence in a foreign language through testing are urged to elect or add modern language courses. A faculty advisor will assist students in making choices from the following list:

- BIOL 1001 - Introduction to Biology *Units: 4*
or
- BIOL 1005 - How Things Work: The Human Body *Units: 4*

- BIOL 1002 - Introduction to Biology Lab *Units: 1*
- GEOL 2101 - Physical Geology *Units: 5*
- HIST 3017 - The Twentieth Century *Units: 4*
- SOC 3411 - Sociology of Gender *Units: 4*
- STAT 1000 - Elements of Probability and Statistics *Units: 5*
- STAT 3010 - Statistical Methods in the Social Sciences *Units: 4*
- Three consecutive quarters of a single modern language.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Art, Art History Option, B.A.

Program Description

Courses in the Department of Art develop our students' perceptual skills, their access to the imagination, and their ability to think critically and independently. Instruction in use of art materials and specific arts processes enables students to create original artworks reflecting their evolving vision. Our program also fosters a broad cultural awareness of the visual arts in society. Graduating majors should be able to clearly express their ideas about art-making. In addition, their grasp of historical and contemporary aesthetic issues should inform their own work. We offer excellent facilities, small classes taught by a distinguished faculty, space to work, a guest lecturer series, and field trips to museums, galleries and artists' studios.

Seven options for the B.A. degree are offered: Art, Art History Option, B.A., Art, Art Studio Option, B.A., Art, Graphic Design Option, B.A., Art, Photography Option, B.A., Art, Pictorial Arts Option (Drawing/Painting/Printmaking), B.A., Art, Spatial Arts Option (Ceramics/Sculpture), B.A., and Art, Multimedia Option (Electronic Art), B.A. The major consists of 64-86 units; the B.A. requires 180 units.

The department also offers a Bachelor of Fine Arts (B.F.A.) degree. This is a professional degree offering students the opportunity to develop a higher level of expertise. It is often the degree of choice for those who intend to pursue graduate studies or attend other professional schools. It allows time for concentrated work within a specific art discipline: Art, Graphic Design Option, B.F.A., Art, Multimedia Option, B.F.A., Art, Photography Option, B.F.A. and Art, Traditional Arts Option, B.F.A. The major consists of 100-102 units; the B.F.A. requires 180-183 units.

The department is also part of the interdisciplinary graduate M.A. degree program in Multimedia (see Multimedia, M.A.).

The Art Department offers Art Studio Minor, Art History Minor, Photography Minor and Multimedia Minor. A Certificate Program in Art Museum and Gallery Studies is offered through the Division of Continuing and International Education.

Student Learning Outcomes

Students graduating with a B.A. or B.F.A. in Art from Cal State East Bay will be able to:

1. think creatively from the expression of an idea to the completion of a work of art;
2. apply art fundamentals successfully;
3. demonstrate an awareness of the history and context of art in relation to contemporary topics and social, political and cultural issues;
4. communicate an understanding for the use of an art medium for expression; and
5. communicate and apply technical proficiency in areas appropriate to their degree option to produce a cohesive body of work.

Career Possibilities

- Animator
- Artist
- Art Critic
- Art Educator
- Art Historian
- Arts Administrator
- Ceramicist
- Graphic Artist/Designer
- Multimedia Developer
- Museum/Gallery Curator
- Painter
- Photographer/Photojournalist
- Printmaker
- Sculptor
- Video Producer
- Web Developer

Major Requirements (B.A.)

The BA degree in Art requires a total of 180 units.

Each major option consists of 78 - 86 required units when choosing one of the six studio options:

1. Art Studio - 78 units
2. Pictorial Arts - 78 units
3. Spatial Arts - 78 units
4. Photography - 84 units
5. Graphic Design (Electronic Art) - 86 units
6. Multimedia - 86 units

The Art History option requires 64 units.

Grade Requirement: All Art majors must receive a grade of C- or better in each course used to satisfy a major requirement.

Art History Option (64 units)

1. Required Courses (16 units)

- ART 1020 - The Creative Process *Units: 4*
- ART 2630 - Digital Photography I *Units: 4*
- ART 3035 - Modern Art *Units: 4*
- ART 3411 - Advanced Survey of World Art *Units: 4*

2. Modern Language Requirements (16 units)

Sixteen units of one or more foreign languages selected with an advisor; or eight units of one foreign language and eight units selected with an advisor from history, literature, anthropology or ethnic studies.

3. Elective Courses (32 units)

Eight upper division courses in art history selected with an advisor.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Art, Art Studio Option, B.A.

Program Description

Courses in the Department of Art develop our students' perceptual skills, their access to the imagination, and their ability to think critically and independently. Instruction in use of art materials and specific arts processes enables students to create original artworks reflecting their evolving vision. Our program also fosters a broad cultural awareness of the visual arts in society. Graduating majors should be able to clearly express their ideas about art-making. In addition, their grasp of historical and contemporary aesthetic issues should inform their own work. We offer excellent facilities, small classes taught by a distinguished faculty, space to work, a guest lecturer series, and field trips to museums, galleries and artists' studios.

Seven options for the B.A. degree are offered: Art, Art History Option, B.A., Art, Art Studio Option, B.A., Art, Graphic Design Option, B.A., Art, Photography Option, B.A., Art, Pictorial Arts Option (Drawing/Painting/Printmaking), B.A., Art, Spatial Arts Option (Ceramics/Sculpture), B.A., and Art, Multimedia Option (Electronic Art), B.A. The major consists of 64-86 units; the B.A. requires 180 units.

The department also offers a Bachelor of Fine Arts (B.F.A.) degree. This is a professional degree offering students the opportunity to develop a higher level of expertise. It is often the degree of choice for those who intend to pursue graduate studies or attend other professional schools. It allows time for concentrated work within a specific art discipline: Art, Graphic Design Option, B.F.A., Art, Multimedia Option, B.F.A., Art, Photography Option, B.F.A. and Art, Traditional Arts Option, B.F.A. The major consists of 100-102 units; the B.F.A. requires 180-183 units.

The department is also part of the interdisciplinary graduate M.A. degree program in Multimedia (see Multimedia, M.A.).

The Art Department offers Art Studio Minor, Art History Minor, Photography Minor and Multimedia Minor. A Certificate Program in Art Museum and Gallery Studies is offered through the Division of Continuing and International Education.

Student Learning Outcomes

Students graduating with a B.A. or B.F.A. in Art from Cal State East Bay will be able to:

1. think creatively from the expression of an idea to the completion of a work of art;
2. apply art fundamentals successfully;
3. demonstrate an awareness of the history and context of art in relation to contemporary topics and social, political and cultural issues;
4. communicate an understanding for the use of an art medium for expression; and
5. communicate and apply technical proficiency in areas appropriate to their degree option to produce a cohesive body of work.

Career Possibilities

- Animator

- Artist
- Art Critic
- Art Educator
- Art Historian
- Arts Administrator
- Ceramicist
- Graphic Artist/Designer
- Multimedia Developer
- Museum/Gallery Curator
- Painter
- Photographer/Photojournalist
- Printmaker
- Sculptor
- Video Producer
- Web Developer

Major Requirements (B.A.)

The BA degree in Art requires a total of 180 units.

Each major option consists of 78 - 86 required units when choosing one of the six studio options:

1. Art Studio - 78 units
2. Pictorial Arts - 78 units
3. Spatial Arts - 78 units
4. Photography - 84 units
5. Graphic Design (Electronic Art) - 86 units
6. Multimedia - 86 units

The Art History option requires 64 units.

Grade Requirement: All Art majors must receive a grade of C- or better in each course used to satisfy a major requirement.

Art Studio Option (78 units)

This option allows students to focus on more than one area.

1. Required Courses (32 units)

- ART 1020 - The Creative Process *Units: 4*
- ART 1112 - Ceramics I *Units: 4*
or ART 1116 Introduction to Sculpture
- ART 1113 - Drawing I *Units: 4*
- ART 3035 - Modern Art *Units: 4*
- ART 3411 - Advanced Survey of World Art *Units: 4*
- ART 3430 - Junior/Senior Seminar *Units: 2*
- ART 3440 - Visual Literacy *Units: 2*
- ART 4071 - Contemporary Art *Units: 4*
- One additional upper division art history course

2. Elective Courses (40 units)

A minimum of 40 additional units taken from the Art Department listing of studio courses, no more than 20 units of which may be lower division. A minimum of 20 units must be taken in a specific option area (Pictorial Arts, Spatial Arts, Photography, Graphic Design or Multimedia) with advisement.

3. Capstone Requirements (6 units)

- ART 4710 - Senior Thesis *Units: 2*
- ART 4720 - Senior Seminar *Units: 2*
- ART 4730 - Senior Portfolio *Units: 2*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Art, Graphic Design Option, B.A.

Program Description

Courses in the Department of Art develop our students' perceptual skills, their access to the imagination, and their ability to think critically and independently. Instruction in use of art materials and specific arts processes enables students to create original artworks reflecting their evolving vision. Our program also fosters a broad cultural awareness of the visual arts in society. Graduating majors should be able to clearly express their ideas about art-making. In addition, their grasp of historical and contemporary aesthetic issues should inform their own work. We offer excellent facilities, small classes taught by a distinguished faculty, space to work, a guest lecturer series, and field trips to museums, galleries and artists' studios.

Seven options for the B.A. degree are offered: Art, Art History Option, B.A., Art, Art Studio Option, B.A., Art, Graphic Design Option, B.A., Art, Photography Option, B.A., Art, Pictorial Arts Option (Drawing/Painting/Printmaking), B.A., Art, Spatial Arts Option (Ceramics/Sculpture), B.A., and Art, Multimedia Option (Electronic Art), B.A. The major consists of 64-86 units; the B.A. requires 180 units.

The department also offers a Bachelor of Fine Arts (B.F.A.) degree. This is a professional degree offering students the opportunity to develop a higher level of expertise. It is often the degree of choice for those who intend to pursue graduate studies or attend other professional schools. It allows time for concentrated work within a specific art discipline: Art, Graphic Design Option, B.F.A., Art, Multimedia Option, B.F.A., Art, Photography Option, B.F.A. and Art, Traditional Arts Option, B.F.A. The major consists of 100-102 units; the B.F.A. requires 180-183 units.

The department is also part of the interdisciplinary graduate M.A. degree program in Multimedia (see Multimedia, M.A.).

The Art Department offers Art Studio Minor, Art History Minor, Photography Minor and Multimedia Minor. A Certificate Program in Art Museum and Gallery Studies is offered through the Division of Continuing and International Education.

Student Learning Outcomes

Students graduating with a B.A. or B.F.A. in Art from Cal State East Bay will be able to:

1. think creatively from the expression of an idea to the completion of a work of art;
2. apply art fundamentals successfully;
3. demonstrate an awareness of the history and context of art in relation to contemporary topics and social, political and cultural issues;
4. communicate an understanding for the use of an art medium for expression; and
5. communicate and apply technical proficiency in areas appropriate to their degree option to produce a cohesive body of work.

Career Possibilities

- Animator
- Artist
- Art Critic
- Art Educator
- Art Historian
- Arts Administrator
- Ceramicist
- Graphic Artist/Designer
- Multimedia Developer
- Museum/Gallery Curator
- Painter
- Photographer/Photojournalist
- Printmaker
- Sculptor
- Video Producer
- Web Developer

Major Requirements (B.A.)

The BA degree in Art requires a total of 180 units.

Each major option consists of 78 - 86 required units when choosing one of the six studio options:

1. Art Studio - 78 units
2. Pictorial Arts - 78 units
3. Spatial Arts - 78 units
4. Photography - 84 units
5. Graphic Design (Electronic Art) - 86 units
6. Multimedia - 86 units

The Art History option requires 64 units.

Grade Requirement: All Art majors must receive a grade of C- or better in each course used to satisfy a major requirement.

Graphic Design Option (Electronic Art) (86 units)

Electronic artists employ the use of rapidly evolving new media tools to express the human imagination. Computers are used to create, control and integrate images, text, graphics, video, sound, and interactivity. Courses stress the development of strong aesthetic and humanistic sensibilities combined with sophisticated technical abilities.

The Electronic Art program has two option areas: Multimedia and Graphic Design. The Graphic Design Option focuses on art that assumes a printed form; the Multimedia Option focuses on art that assumes an electronic form.

1. Required Courses (78 units)

- ART 1020 - The Creative Process *Units: 4*
- ART 1113 - Drawing I *Units: 4*
- ART 2025 - Basics of New Media *Units: 4*
- ART 2630 - Digital Photography I *Units: 4*
- ART 2805 - Computers and Print *Units: 4*
- ART 2810 - Principles of Design *Units: 4*
- ART 2830 - Web Design *Units: 4*

- ART 3035 - Modern Art *Units: 4*
- ART 3144 - Drawing Lab *Units: 2 (take 3 times for 6 units)*
- ART 3400 - History of Art and Technology *Units: 4*
- ART 3411 - Advanced Survey of World Art *Units: 4*
- ART 3810 - Graphic Design I *Units: 4*
- ART 3815 - Typography *Units: 4*
- ART 3830 - Digital Imaging *Units: 4*
- ART 3855 - Graphic Design II *Units: 4*
- ART 3860 - Production Design for Print and Screen *Units: 4*
- ART 3870 - Web Authoring *Units: 4*
- ART 4060 - History of Graphic Design *Units: 4*
- ART 4071 - Contemporary Art *Units: 4*

2. Capstone Requirements (8 units)

- ART 4230 - Graphic Design Senior Project *Units: 4*
- ART 4740 - Professional Practices *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Art, Graphic Design Option, B.F.A.

Program Description

Courses in the Department of Art develop our students' perceptual skills, their access to the imagination, and their ability to think critically and independently. Instruction in use of art materials and specific arts processes enables students to create original artworks reflecting their evolving vision. Our program also fosters a broad cultural awareness of the visual arts in society. Graduating majors should be able to clearly express their ideas about art-making. In addition, their grasp of historical and contemporary aesthetic issues should inform their own work. We offer excellent facilities, small classes taught by a distinguished faculty, space to work, a guest lecturer series, and field trips to museums, galleries and artists' studios.

Seven options for the B.A. degree are offered: Art, Art History Option, B.A., Art, Art Studio Option, B.A., Art, Graphic Design Option, B.A., Art, Photography Option, B.A., Art, Pictorial Arts Option (Drawing/Painting/Printmaking), B.A., Art, Spatial Arts Option (Ceramics/Sculpture), B.A., and Art, Multimedia Option (Electronic Art), B.A. The major consists of 64-86 units; the B.A. requires 180 units.

The department also offers a Bachelor of Fine Arts (B.F.A.) degree. This is a professional degree offering students the opportunity to develop a higher level of expertise. It is often the degree of choice for those who intend to pursue graduate studies or attend other professional schools. It allows time for concentrated work within a specific art discipline: Art, Graphic Design Option, B.F.A., Art, Multimedia Option, B.F.A., Art, Photography Option, B.F.A. and Art, Traditional Arts Option, B.F.A. The major consists of 100-102 units; the B.F.A. requires 180-183 units.

The department is also part of the interdisciplinary graduate M.A. degree program in Multimedia (see Multimedia, M.A.).

The Art Department offers Art Studio Minor, Art History Minor, Photography Minor and Multimedia Minor. A Certificate Program in Art Museum and Gallery Studies is offered through the Division of Continuing and International Education.

Student Learning Outcomes

Students graduating with a B.A. or B.F.A. in Art from Cal State East Bay will be able to:

1. think creatively from the expression of an idea to the completion of a work of art;
2. apply art fundamentals successfully;
3. demonstrate an awareness of the history and context of art in relation to contemporary topics and social, political and cultural issues;
4. communicate an understanding for the use of an art medium for expression; and
5. communicate and apply technical proficiency in areas appropriate to their degree option to produce a cohesive body of work.

Career Possibilities

- Animator
- Artist
- Art Critic
- Art Educator
- Art Historian
- Arts Administrator
- Ceramicist
- Graphic Artist/Designer
- Multimedia Developer
- Museum/Gallery Curator
- Painter
- Photographer/Photojournalist
- Printmaker
- Sculptor
- Video Producer
- Web Developer

Major Requirements (B.F.A.)

The major consists of 100-102 units; the B.F.A. degree requires a total of 180-182 units.

Grade Requirement: Art majors must receive a grade of C- or better in each course used to satisfy a major requirement.

Admission and Degree Requirements

Applicants must meet university requirements for admission and must first be admitted to the B.A. degree program. In addition, they must meet the following requirements to apply for admission to the B.F.A. program:

1. Complete 30 units of Studio Art with a grade point average of 3.5 or better.
2. Submit a portfolio of work to the faculty B.F.A. committee along with a short statement summarizing their reasons for applying. Application reviews will be held once a year for admission the following year.
3. Maintain a minimum 3.5 GPA in all Art classes while in the program.
4. Prepare and install a final exhibition of their work in either the Art Department Galleries or outside exhibition spaces (or a portfolio for Electronic Art students) to be reviewed by the Art Department faculty to determine the candidate's professional competence in his/her area of concentration.

Graphic Design Option (102 units)

1. Required Courses (78 units)

- ART 1020 - The Creative Process *Units: 4*
- ART 1113 - Drawing I *Units: 4*
- ART 2025 - Basics of New Media *Units: 4*
- ART 2630 - Digital Photography I *Units: 4*
- ART 2805 - Computers and Print *Units: 4*
- ART 2810 - Principles of Design *Units: 4*

- ART 2830 - Web Design *Units: 4*
- ART 3035 - Modern Art *Units: 4*
- ART 3144 - Drawing Lab *Units: 2*
- ART 3400 - History of Art and Technology *Units: 4*
- ART 3411 - Advanced Survey of World Art *Units: 4*
- ART 3810 - Graphic Design I *Units: 4*
- ART 3815 - Typography *Units: 4*
- ART 3830 - Digital Imaging *Units: 4*
- ART 3855 - Graphic Design II *Units: 4*
- ART 3860 - Production Design for Print and Screen *Units: 4*
- ART 3870 - Web Authoring *Units: 4*
- ART 4060 - History of Graphic Design *Units: 4*
- ART 4071 - Contemporary Art *Units: 4*

2. Elective Courses (16 units)

Sixteen (16) units of upper division studio art electives by advisement.

3. Capstone Requirements (8 units)

- ART 4230 - Graphic Design Senior Project *Units: 4*
- ART 4740 - Professional Practices *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Art, Multimedia Option (Electronic Art), B.A.

Program Description

Courses in the Department of Art develop our students' perceptual skills, their access to the imagination, and their ability to think critically and independently. Instruction in use of art materials and specific arts processes enables students to create original artworks reflecting their evolving vision. Our program also fosters a broad cultural awareness of the visual arts in society. Graduating majors should be able to clearly express their ideas about art-making. In addition, their grasp of historical and contemporary aesthetic issues should inform their own work. We offer excellent facilities, small classes taught by a distinguished faculty, space to work, a guest lecturer series, and field trips to museums, galleries and artists' studios.

Seven options for the B.A. degree are offered: Art, Art History Option, B.A., Art, Art Studio Option, B.A., Art, Graphic Design Option, B.A., Art, Photography Option, B.A., Art, Pictorial Arts Option (Drawing/Painting/Printmaking), B.A., Art, Spatial Arts Option (Ceramics/Sculpture), B.A., and Art, Multimedia Option (Electronic Art), B.A. The major consists of 64-86 units; the B.A. requires 180 units.

The department also offers a Bachelor of Fine Arts (B.F.A.) degree. This is a professional degree offering students the opportunity to develop a higher level of expertise. It is often the degree of choice for those who intend to pursue graduate studies or attend other professional schools. It allows time for concentrated work within a specific art discipline: Art, Graphic Design Option, B.F.A., Art, Multimedia Option, B.F.A., Art, Photography Option, B.F.A. and Art, Traditional Arts Option, B.F.A. The major consists of 100-102 units; the B.F.A. requires 180-183 units.

The department is also part of the interdisciplinary graduate M.A. degree program in Multimedia (see Multimedia, M.A.).

The Art Department offers Art Studio Minor, Art History Minor, Photography Minor and Multimedia Minor. A Certificate Program in Art Museum and Gallery Studies is offered through the Division of Continuing and International Education.

Student Learning Outcomes

Students graduating with a B.A. or B.F.A. in Art from Cal State East Bay will be able to:

1. think creatively from the expression of an idea to the completion of a work of art;
2. apply art fundamentals successfully;
3. demonstrate an awareness of the history and context of art in relation to contemporary topics and social, political and cultural issues;
4. communicate an understanding for the use of an art medium for expression; and
5. communicate and apply technical proficiency in areas appropriate to their degree option to produce a cohesive body of work.

Career Possibilities

- Animator
- Artist
- Art Critic
- Art Educator
- Art Historian
- Arts Administrator
- Ceramicist
- Graphic Artist/Designer
- Multimedia Developer
- Museum/Gallery Curator
- Painter
- Photographer/Photojournalist
- Printmaker
- Sculptor
- Video Producer
- Web Developer

Major Requirements (B.A.)

The BA degree in Art requires a total of 180 units.

Each major option consists of 78 - 86 required units when choosing one of the six studio options:

1. Art Studio - 78 units
 2. Pictorial Arts - 78 units
 3. Spatial Arts - 78 units
 4. Photography - 84 units
 5. Graphic Design (Electronic Art) - 86 units
 6. Multimedia - 86 units
- The Art History option requires 64 units.

Grade Requirement: All Art majors must receive a grade of C- or better in each course used to satisfy a major requirement.

Multimedia Option (Electronic Art) (86 units)

1. Required Courses (78 units)

- ART 1020 - The Creative Process *Units: 4*
- ART 1113 - Drawing I *Units: 4*
- ART 1114 - Painting I *Units: 4*
or ART 1115 *Printmaking I*,
or ART 1116 *Introduction to Sculpture*,
or select a 4-unit studio class by advisement.
- ART 2025 - Basics of New Media *Units: 4*
- ART 2630 - Digital Photography I *Units: 4*
- ART 2810 - Principles of Design *Units: 4*
- ART 2830 - Web Design *Units: 4*
- ART 3035 - Modern Art *Units: 4*
- ART 3144 - Drawing Lab *Units: 2*
- ART 3400 - History of Art and Technology *Units: 4*
- ART 3411 - Advanced Survey of World Art *Units: 4*
- ART 3800 - Animation *Units: 4*
- ART 3820 - Digital Video *Units: 4*
- ART 3825 - Motion Graphics *Units: 4*
- ART 3830 - Digital Imaging *Units: 4*
- ART 3870 - Web Authoring *Units: 4*
- ART 4070 - Currents in New Media *Units: 4*
- ART 4071 - Contemporary Art *Units: 4*
- ART 4200 - Interactive Authoring *Units: 4*

2. Capstone Requirements (8 units)

- ART 4220 - Multimedia Senior Project *Units: 4*
- ART 4740 - Professional Practices *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Art, Multimedia Option, B.F.A.

Program Description

Courses in the Department of Art develop our students' perceptual skills, their access to the imagination, and their ability to think critically and independently. Instruction in use of art materials and specific arts processes enables students to create original artworks reflecting their evolving vision. Our program also fosters a broad cultural awareness of the visual arts in society. Graduating majors should be able to clearly express their ideas about art-making. In addition, their grasp of historical and contemporary aesthetic issues should inform their own work. We offer excellent facilities, small classes taught by a distinguished faculty, space to work, a guest lecturer series, and field trips to museums, galleries and artists' studios.

Seven options for the B.A. degree are offered: Art, Art History Option, B.A., Art, Art Studio Option, B.A., Art, Graphic Design Option, B.A., Art, Photography Option, B.A., Art, Pictorial Arts Option (Drawing/Painting/Printmaking), B.A., Art, Spatial Arts Option (Ceramics/Sculpture), B.A., and Art, Multimedia Option (Electronic Art), B.A. The major consists of 64-86 units; the B.A. requires 180 units.

The department also offers a Bachelor of Fine Arts (B.F.A.) degree. This is a professional degree offering students the opportunity to develop a higher level of expertise. It is often the degree of choice for those who intend to pursue graduate studies or attend other professional schools. It

allows time for concentrated work within a specific art discipline: Art, Graphic Design Option, B.F.A., Art, Multimedia Option, B.F.A., Art, Photography Option, B.F.A. and Art, Traditional Arts Option, B.F.A. The major consists of 100-102 units; the B.F.A. requires 180-183 units.

The department is also part of the interdisciplinary graduate M.A. degree program in Multimedia (see Multimedia, M.A.).

The Art Department offers Art Studio Minor, Art History Minor, Photography Minor and Multimedia Minor. A Certificate Program in Art Museum and Gallery Studies is offered through the Division of Continuing and International Education.

Student Learning Outcomes

Students graduating with a B.A. or B.F.A. in Art from Cal State East Bay will be able to:

1. think creatively from the expression of an idea to the completion of a work of art;
2. apply art fundamentals successfully;
3. demonstrate an awareness of the history and context of art in relation to contemporary topics and social, political and cultural issues;
4. communicate an understanding for the use of an art medium for expression; and
5. communicate and apply technical proficiency in areas appropriate to their degree option to produce a cohesive body of work.

Career Possibilities

- Animator
- Artist
- Art Critic
- Art Educator
- Art Historian
- Arts Administrator
- Ceramicist
- Graphic Artist/Designer
- Multimedia Developer
- Museum/Gallery Curator
- Painter
- Photographer/Photojournalist
- Printmaker
- Sculptor
- Video Producer
- Web Developer

Major Requirements (B.F.A.)

The major consists of 100-102 units; the B.F.A. degree requires a total of 180-182 units.

Grade Requirement: Art majors must receive a grade of C- or better in each course used to satisfy a major requirement.

Admission and Degree Requirements

Applicants must meet university requirements for admission and must first be admitted to the B.A. degree program. In addition, they must meet the following requirements to apply for admission to the B.F.A. program:

1. Complete 30 units of Studio Art with a grade point average of 3.5 or better.
2. Submit a portfolio of work to the faculty B.F.A. committee along with a short statement summarizing their reasons for applying. Application reviews will be held once a year for admission the following year.
3. Maintain a minimum 3.5 GPA in all Art classes while in the program.
4. Prepare and install a final exhibition of their work in either the Art Department Galleries or outside exhibition spaces (or a portfolio for Electronic Art students) to be reviewed by the Art Department faculty to determine the candidate's professional competence in his/her area of concentration.

Multimedia Option (102 units)

1. Required Courses (78 units)

- ART 1020 - The Creative Process *Units: 4*
- ART 1113 - Drawing I *Units: 4*
- ART 1114 - Painting I *Units: 4*
or ART 1115 Printmaking I,
or ART 1116 Introduction to Sculpture,
or ART 2701 Black and White Photography I,
or other 4-unit studio class by advisement.
- ART 2025 - Basics of New Media *Units: 4*
- ART 2630 - Digital Photography I *Units: 4*
- ART 2810 - Principles of Design *Units: 4*
- ART 2830 - Web Design *Units: 4*
- ART 3144 - Drawing Lab *Units: 2*
- ART 3400 - History of Art and Technology *Units: 4*
- ART 3411 - Advanced Survey of World Art *Units: 4*
- ART 3800 - Animation *Units: 4*
- ART 3820 - Digital Video *Units: 4*
- ART 3825 - Motion Graphics *Units: 4*
- ART 3830 - Digital Imaging *Units: 4*
- ART 3870 - Web Authoring *Units: 4*
- ART 4070 - Currents in New Media *Units: 4*
- ART 4071 - Contemporary Art *Units: 4*
- ART 4200 - Interactive Authoring *Units: 4*

2. Elective Courses (16 units)

Sixteen (16) units of upper division studio art electives by advisement.

3. Capstone Requirements (8 units)

- ART 4220 - Multimedia Senior Project *Units: 4*
- ART 4740 - Professional Practices *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Art, Photography Option, B.A.

Program Description

Courses in the Department of Art develop our students' perceptual skills, their access to the imagination, and their ability to think critically and independently. Instruction in use of art materials and specific arts processes enables students to create original artworks reflecting their evolving vision. Our program also fosters a broad cultural awareness of the visual arts in society. Graduating majors should be able to clearly express their ideas about art-making. In addition, their grasp of historical and contemporary aesthetic issues should inform their own work. We offer

excellent facilities, small classes taught by a distinguished faculty, space to work, a guest lecturer series, and field trips to museums, galleries and artists' studios.

Seven options for the B.A. degree are offered: Art, Art History Option, B.A., Art, Art Studio Option, B.A., Art, Graphic Design Option, B.A., Art, Photography Option, B.A., Art, Pictorial Arts Option (Drawing/Painting/Printmaking), B.A., Art, Spatial Arts Option (Ceramics/Sculpture), B.A., and Art, Multimedia Option (Electronic Art), B.A. The major consists of 64-86 units; the B.A. requires 180 units.

The department also offers a Bachelor of Fine Arts (B.F.A.) degree. This is a professional degree offering students the opportunity to develop a higher level of expertise. It is often the degree of choice for those who intend to pursue graduate studies or attend other professional schools. It allows time for concentrated work within a specific art discipline: Art, Graphic Design Option, B.F.A., Art, Multimedia Option, B.F.A., Art, Photography Option, B.F.A. and Art, Traditional Arts Option, B.F.A. The major consists of 100-102 units; the B.F.A. requires 180-183 units.

The department is also part of the interdisciplinary graduate M.A. degree program in Multimedia (see Multimedia, M.A.).

The Art Department offers Art Studio Minor, Art History Minor, Photography Minor and Multimedia Minor. A Certificate Program in Art Museum and Gallery Studies is offered through the Division of Continuing and International Education.

Student Learning Outcomes

Students graduating with a B.A. or B.F.A. in Art from Cal State East Bay will be able to:

1. think creatively from the expression of an idea to the completion of a work of art;
2. apply art fundamentals successfully;
3. demonstrate an awareness of the history and context of art in relation to contemporary topics and social, political and cultural issues;
4. communicate an understanding for the use of an art medium for expression; and
5. communicate and apply technical proficiency in areas appropriate to their degree option to produce a cohesive body of work.

Career Possibilities

- Animator
- Artist
- Art Critic
- Art Educator
- Art Historian
- Arts Administrator
- Ceramicist
- Graphic Artist/Designer
- Multimedia Developer
- Museum/Gallery Curator
- Painter
- Photographer/Photojournalist
- Printmaker
- Sculptor
- Video Producer
- Web Developer

Major Requirements (B.A.)

The BA degree in Art requires a total of 180 units.

Each major option consists of 78 - 86 required units when choosing one of the six studio options:

1. Art Studio - 78 units
2. Pictorial Arts - 78 units
3. Spatial Arts - 78 units
4. Photography - 84 units

5. Graphic Design (Electronic Art) - 86 units
 6. Multimedia - 86 units
- The Art History option requires 64 units.

Grade Requirement: All Art majors must receive a grade of C- or better in each course used to satisfy a major requirement.

Photography Option (84 units)

The Photography Option provides well-grounded studies in the aesthetic and practical areas of contemporary camera-generated imagery with an emphasis on digital technologies. Students choose from a wide range of electives to develop skills in specialty areas culminating in capstone classes designed to prepare the students for a career in photography or to apply to graduate school.

1. Required Courses (62 units)

- ART 1020 - The Creative Process *Units: 4*
- ART 1113 - Drawing I *Units: 4*
- ART 2025 - Basics of New Media *Units: 4*
- ART 2630 - Digital Photography I *Units: 4*
- ART 2810 - Principles of Design *Units: 4*
- ART 2830 - Web Design *Units: 4*
- ART 3035 - Modern Art *Units: 4*
- ART 3400 - History of Art and Technology *Units: 4*
- ART 3411 - Advanced Survey of World Art *Units: 4*
- ART 3440 - Visual Literacy *Units: 2*
- ART 3600 - Digital Photography II *Units: 4*
or crosslisted COMM 3600.
- ART 3670 - Introduction to Studio Lighting *Units: 4*
or crosslisted COMM 3670.
- ART 4600 - Image and Idea *Units: 4*
- ART 4620 - History of Photography *Units: 4*
or crosslisted COMM 4620.
- ART 4645 - Creative Photography *Units: 4*
- One upper division art history course.

2. Elective Courses (16 units)

Students to select from the following by advisement:

Lower Division Art Studio course.

Select one 4 unit course from the following:

- ART 1112 - Ceramics I *Units: 4*
- ART 1114 - Painting I *Units: 4*
- ART 1115 - Printmaking I *Units: 4*
- ART 1116 - Introduction to Sculpture *Units: 4*
- ART 1121 - Introduction to Bookmaking *Units: 4*
- Or other art studio course by advisement.

And 12 units from:

- ART 2702 - Black and White Photography II *Units: 4*
- ART 3144 - Drawing Lab *Units: 2*
- ART 3620 - Alternative Processes in Photography *Units: 4*
- ART 3630 - Digital Photography III *Units: 4*
or crosslisted COMM 3630.
- ART 3655 - Advanced Landscape Photography *Units: 4*
- ART 3660 - Portrait Photography *Units: 4*
or crosslisted COMM 3660.
- ART 3661 - Advanced Portrait Photography *Units: 4*
- ART 3671 - Advanced Studio Lighting *Units: 4*
or crosslisted COMM 3671.
- ART 3820 - Digital Video *Units: 4*
- ART 3830 - Digital Imaging *Units: 4*
- ART 3870 - Web Authoring *Units: 4*
- ART 4600 - Image and Idea *Units: 4*
or crosslisted COMM 4600.
- ART 4900 - Independent Study *Units: 1-4*

3. Capstone Requirements (6 units)

- ART 3680 - Photography Career Preparation *Units: 2*
or crosslisted COMM 3680.
- ART 4745 - Senior Project in Photography *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Art, Photography Option, B.F.A.

Program Description

Courses in the Department of Art develop our students' perceptual skills, their access to the imagination, and their ability to think critically and independently. Instruction in use of art materials and specific arts processes enables students to create original artworks reflecting their evolving vision. Our program also fosters a broad cultural awareness of the visual arts in society. Graduating majors should be able to clearly express their ideas about art-making. In addition, their grasp of historical and contemporary aesthetic issues should inform their own work. We offer excellent facilities, small classes taught by a distinguished faculty, space to work, a guest lecturer series, and field trips to museums, galleries and artists' studios.

Seven options for the B.A. degree are offered: Art, Art History Option, B.A., Art, Art Studio Option, B.A., Art, Graphic Design Option, B.A., Art, Photography Option, B.A., Art, Pictorial Arts Option (Drawing/Painting/Printmaking), B.A., Art, Spatial Arts Option (Ceramics/Sculpture), B.A., and Art, Multimedia Option (Electronic Art), B.A. The major consists of 64-86 units; the B.A. requires 180 units.

The department also offers a Bachelor of Fine Arts (B.F.A.) degree. This is a professional degree offering students the opportunity to develop a higher level of expertise. It is often the degree of choice for those who intend to pursue graduate studies or attend other professional schools. It allows time for concentrated work within a specific art discipline: Art, Graphic Design Option, B.F.A., Art, Multimedia Option, B.F.A., Art, Photography Option, B.F.A. and Art, Traditional Arts Option, B.F.A. The major consists of 100-102 units; the B.F.A. requires 180-183 units.

The department is also part of the interdisciplinary graduate M.A. degree program in Multimedia (see Multimedia, M.A.).

The Art Department offers Art Studio Minor, Art History Minor, Photography Minor and Multimedia Minor. A Certificate Program in Art Museum and Gallery Studies is offered through the Division of Continuing and International Education.

Student Learning Outcomes

Students graduating with a B.A. or B.F.A. in Art from Cal State East Bay will be able to:

1. think creatively from the expression of an idea to the completion of a work of art;
2. apply art fundamentals successfully;
3. demonstrate an awareness of the history and context of art in relation to contemporary topics and social, political and cultural issues;
4. communicate an understanding for the use of an art medium for expression; and
5. communicate and apply technical proficiency in areas appropriate to their degree option to produce a cohesive body of work.

Career Possibilities

- Animator
- Artist
- Art Critic
- Art Educator
- Art Historian
- Arts Administrator
- Ceramicist
- Graphic Artist/Designer
- Multimedia Developer
- Museum/Gallery Curator
- Painter
- Photographer/Photojournalist
- Printmaker
- Sculptor
- Video Producer
- Web Developer

Major Requirements (B.F.A.)

The major consists of 100-102 units; the B.F.A. degree requires a total of 180-182 units.

Grade Requirement: Art majors must receive a grade of C- or better in each course used to satisfy a major requirement.

Admission and Degree Requirements

Applicants must meet university requirements for admission and must first be admitted to the B.A. degree program. In addition, they must meet the following requirements to apply for admission to the B.F.A. program:

1. Complete 30 units of Studio Art with a grade point average of 3.5 or better.
2. Submit a portfolio of work to the faculty B.F.A. committee along with a short statement summarizing their reasons for applying. Application reviews will be held once a year for admission the following year.
3. Maintain a minimum 3.5 GPA in all Art classes while in the program.
4. Prepare and install a final exhibition of their work in either the Art Department Galleries or outside exhibition spaces (or a portfolio for Electronic Art students) to be reviewed by the Art Department faculty to determine the candidate's professional competence in his/her area of concentration.

Photography Option (100 units)

1. Required Courses (80 units)

- ART 1020 - The Creative Process *Units: 4*
- ART 1112 - Ceramics I *Units: 4*
or ART 1114 *Painting I*,
or ART 1115 *Printmaking I*,
or ART 1116 *Introduction to Sculpture*,
or ART 1121 *Introduction to Bookmaking*.
- ART 1113 - Drawing I *Units: 4*
- ART 2025 - Basics of New Media *Units: 4*
- ART 2630 - Digital Photography I *Units: 4*
- ART 2810 - Principles of Design *Units: 4*
- ART 2830 - Web Design *Units: 4*
- ART 3035 - Modern Art *Units: 4*
- ART 3400 - History of Art and Technology *Units: 4*
- ART 3411 - Advanced Survey of World Art *Units: 4*
- ART 3440 - Visual Literacy *Units: 2*
- ART 3600 - Digital Photography II *Units: 4*
or crosslisted COMM 3600.
- ART 3670 - Introduction to Studio Lighting *Units: 4*
or crosslisted COMM 3670.
- ART 3680 - Photography Career Preparation *Units: 2*
- ART 4071 - Contemporary Art *Units: 4*
or ART 4621 *History of Photography Since 1960*
- ART 4600 - Image and Idea *Units: 4*
or crosslisted COMM 4600.
- ART 4620 - History of Photography *Units: 4*
or crosslisted COMM 4620.
- ART 4645 - Creative Photography *Units: 4*
- ART 4745 - Senior Project in Photography *Units: 4*
- ART 4900 - Independent Study *Units: 1-4*
- One upper division art history course.

2. Elective Courses (20 units)

Students to select from the following by advisement:

- ART 2702 - Black and White Photography II *Units: 4*
- ART 3620 - Alternative Processes in Photography *Units: 4*
- ART 3630 - Digital Photography III *Units: 4*
or crosslisted COMM 3630.
- ART 3655 - Advanced Landscape Photography *Units: 4*
- ART 3660 - Portrait Photography *Units: 4*
or crosslisted COMM 3660.
- ART 3661 - Advanced Portrait Photography *Units: 4*
- ART 3671 - Advanced Studio Lighting *Units: 4*
- ART 3810 - Graphic Design I *Units: 4*
- ART 3820 - Digital Video *Units: 4*
- ART 3830 - Digital Imaging *Units: 4*
- ART 3870 - Web Authoring *Units: 4*
- ART 4621 - History of Photography Since 1960 *Units: 4*
- ART 4900 - Independent Study *Units: 1-4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Art, Pictorial Arts Option (Drawing/Painting/Printmaking), B.A.

Program Description

Courses in the Department of Art develop our students' perceptual skills, their access to the imagination, and their ability to think critically and independently. Instruction in use of art materials and specific arts processes enables students to create original artworks reflecting their evolving vision. Our program also fosters a broad cultural awareness of the visual arts in society. Graduating majors should be able to clearly express their ideas about art-making. In addition, their grasp of historical and contemporary aesthetic issues should inform their own work. We offer excellent facilities, small classes taught by a distinguished faculty, space to work, a guest lecturer series, and field trips to museums, galleries and artists' studios.

Seven options for the B.A. degree are offered: Art, Art History Option, B.A., Art, Art Studio Option, B.A., Art, Graphic Design Option, B.A., Art, Photography Option, B.A., Art, Pictorial Arts Option (Drawing/Painting/Printmaking), B.A., Art, Spatial Arts Option (Ceramics/Sculpture), B.A., and Art, Multimedia Option (Electronic Art), B.A. The major consists of 64-86 units; the B.A. requires 180 units.

The department also offers a Bachelor of Fine Arts (B.F.A.) degree. This is a professional degree offering students the opportunity to develop a higher level of expertise. It is often the degree of choice for those who intend to pursue graduate studies or attend other professional schools. It allows time for concentrated work within a specific art discipline: Art, Graphic Design Option, B.F.A., Art, Multimedia Option, B.F.A., Art, Photography Option, B.F.A. and Art, Traditional Arts Option, B.F.A. The major consists of 100-102 units; the B.F.A. requires 180-183 units.

The department is also part of the interdisciplinary graduate M.A. degree program in Multimedia (see Multimedia, M.A.).

The Art Department offers Art Studio Minor, Art History Minor, Photography Minor and Multimedia Minor. A Certificate Program in Art Museum and Gallery Studies is offered through the Division of Continuing and International Education.

Student Learning Outcomes

Students graduating with a B.A. or B.F.A. in Art from Cal State East Bay will be able to:

1. think creatively from the expression of an idea to the completion of a work of art;
2. apply art fundamentals successfully;
3. demonstrate an awareness of the history and context of art in relation to contemporary topics and social, political and cultural issues;
4. communicate an understanding for the use of an art medium for expression; and
5. communicate and apply technical proficiency in areas appropriate to their degree option to produce a cohesive body of work.

Career Possibilities

- Animator
- Artist
- Art Critic
- Art Educator
- Art Historian
- Arts Administrator
- Ceramicist
- Graphic Artist/Designer
- Multimedia Developer
- Museum/Gallery Curator
- Painter
- Photographer/Photojournalist
- Printmaker

- Sculptor
- Video Producer
- Web Developer

Major Requirements (B.A.)

The BA degree in Art requires a total of 180 units.

Each major option consists of 78 - 86 required units when choosing one of the six studio options:

1. Art Studio - 78 units
 2. Pictorial Arts - 78 units
 3. Spatial Arts - 78 units
 4. Photography - 84 units
 5. Graphic Design (Electronic Art) - 86 units
 6. Multimedia - 86 units
- The Art History option requires 64 units.

Grade Requirement: All Art majors must receive a grade of C- or better in each course used to satisfy a major requirement.

Pictorial Arts Option (Drawing/Painting/Printmaking) (78 units)

Beginning painting, printmaking and drawing courses offer traditional and nontraditional approaches to studies from life as well as more subjective approaches to imaginative work. Intermediate and advanced courses guide students toward a personal vision.

1. Required Courses (48 units)

- ART 1020 - The Creative Process *Units: 4*
- ART 1112 - Ceramics I *Units: 4*
or ART 1116 Introduction to Sculpture
- ART 1113 - Drawing I *Units: 4*
- ART 1114 - Painting I *Units: 4*
- ART 1115 - Printmaking I *Units: 4*
- ART 3035 - Modern Art *Units: 4*
- ART 3141 - Drawing II *Units: 4*
- ART 3212 - Painting II *Units: 4*
- ART 3411 - Advanced Survey of World Art *Units: 4*
- ART 3430 - Junior/Senior Seminar *Units: 2*
- ART 3440 - Visual Literacy *Units: 2*
- ART 4071 - Contemporary Art *Units: 4*
- One additional upper division art history course.

2. Elective Courses (24 units)

- ART 3141 - Drawing II *Units: 4*
- ART 3142 - Figure Drawing *Units: 4*
- ART 3212 - Painting II *Units: 4*
- ART 3213 - Painting III *Units: 4*
- ART 4143 - Advanced Drawing *Units: 4*
- ART 4857 - Advanced Printmaking *Units: 4*

- Or other art studio course by advisement.

3. Capstone Requirements (6 units)

- ART 4710 - Senior Thesis *Units: 2*
- ART 4720 - Senior Seminar *Units: 2*
- ART 4730 - Senior Portfolio *Units: 2*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Art, Spatial Arts Option (Ceramics/Sculpture), B.A.

Program Description

Courses in the Department of Art develop our students' perceptual skills, their access to the imagination, and their ability to think critically and independently. Instruction in use of art materials and specific arts processes enables students to create original artworks reflecting their evolving vision. Our program also fosters a broad cultural awareness of the visual arts in society. Graduating majors should be able to clearly express their ideas about art-making. In addition, their grasp of historical and contemporary aesthetic issues should inform their own work. We offer excellent facilities, small classes taught by a distinguished faculty, space to work, a guest lecturer series, and field trips to museums, galleries and artists' studios.

Seven options for the B.A. degree are offered: Art, Art History Option, B.A., Art, Art Studio Option, B.A., Art, Graphic Design Option, B.A., Art, Photography Option, B.A., Art, Pictorial Arts Option (Drawing/Painting/Printmaking), B.A., Art, Spatial Arts Option (Ceramics/Sculpture), B.A., and Art, Multimedia Option (Electronic Art), B.A. The major consists of 64-86 units; the B.A. requires 180 units.

The department also offers a Bachelor of Fine Arts (B.F.A.) degree. This is a professional degree offering students the opportunity to develop a higher level of expertise. It is often the degree of choice for those who intend to pursue graduate studies or attend other professional schools. It allows time for concentrated work within a specific art discipline: Art, Graphic Design Option, B.F.A., Art, Multimedia Option, B.F.A., Art, Photography Option, B.F.A. and Art, Traditional Arts Option, B.F.A. The major consists of 100-102 units; the B.F.A. requires 180-183 units.

The department is also part of the interdisciplinary graduate M.A. degree program in Multimedia (see Multimedia, M.A.).

The Art Department offers Art Studio Minor, Art History Minor, Photography Minor and Multimedia Minor. A Certificate Program in Art Museum and Gallery Studies is offered through the Division of Continuing and International Education.

Student Learning Outcomes

Students graduating with a B.A. or B.F.A. in Art from Cal State East Bay will be able to:

1. think creatively from the expression of an idea to the completion of a work of art;
2. apply art fundamentals successfully;
3. demonstrate an awareness of the history and context of art in relation to contemporary topics and social, political and cultural issues;
4. communicate an understanding for the use of an art medium for expression; and
5. communicate and apply technical proficiency in areas appropriate to their degree option to produce a cohesive body of work.

Career Possibilities

- Animator
- Artist

- Art Critic
- Art Educator
- Art Historian
- Arts Administrator
- Ceramicist
- Graphic Artist/Designer
- Multimedia Developer
- Museum/Gallery Curator
- Painter
- Photographer/Photojournalist
- Printmaker
- Sculptor
- Video Producer
- Web Developer

Major Requirements (B.A.)

The BA degree in Art requires a total of 180 units.

Each major option consists of 78 - 86 required units when choosing one of the six studio options:

1. Art Studio - 78 units
2. Pictorial Arts - 78 units
3. Spatial Arts - 78 units
4. Photography - 84 units
5. Graphic Design (Electronic Art) - 86 units
6. Multimedia - 86 units

The Art History option requires 64 units.

Grade Requirement: All Art majors must receive a grade of C- or better in each course used to satisfy a major requirement.

Spatial Arts Option (Ceramics/Sculpture) (78 units)

The Spatial Arts program familiarizes students with a broad range of sculptural processes. The department has one of the best studio facilities in the Bay Area.

1. Required Courses (40 units)

- ART 1020 - The Creative Process *Units: 4*
- ART 1113 - Drawing I *Units: 4*
- ART 2701 - Black and White Photography I *Units: 4*
or crosslisted COMM 2701.
- ART 3035 - Modern Art *Units: 4*
- ART 3144 - Drawing Lab *Units: 2 (must be taken 3 times for 6 units)*
or any six units of upper division drawing.
- ART 3411 - Advanced Survey of World Art *Units: 4*
- ART 3440 - Visual Literacy *Units: 2*
- ART 4071 - Contemporary Art *Units: 4*
- Two additional upper division art history courses.

Note: for students on the Interactive Sculpture track, these courses must be ART 3400 History of Art and Technology, and ART 4070 Currents in New Media.

2. Elective Tracks Requirements (32 units)

Students must choose two of the following three elective tracks:

A. Interactive Sculpture (16 units)

- ART 3330 - Electronics for Sculpture *Units: 4*
- ART 4370 - Human and Machine Performance *Units: 4*
- Select 4 units of coursework covering tangible digital environments, with consent of department.
- Select 4 units of coursework covering interactive sculpture, with consent of department.

B. Traditional Sculpture (16 units)

- ART 1116 - Introduction to Sculpture *Units: 4*
- ART 3316 - Advanced Sculpture *Units: 4*
- ART 3340 - Mixed Media Assemblage *Units: 4*
- Select 4 units of upper division coursework covering fabrication for sculpture, with consent of department.

C. Ceramics (16 units)

- ART 1112 - Ceramics I *Units: 4*
- ART 3512 - Ceramics II *Units: 4*
- ART 3513 - Ceramics III *Units: 4*
- Select 4 units of upper division coursework covering figure modeling in clay, with consent of department.

3. Capstone Requirements (6 units)

- ART 4710 - Senior Thesis *Units: 2*
- ART 4720 - Senior Seminar *Units: 2*
- ART 4730 - Senior Portfolio *Units: 2*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Art, Traditional Arts Option, B.F.A.

Program Description

Courses in the Department of Art develop our students' perceptual skills, their access to the imagination, and their ability to think critically and independently. Instruction in use of art materials and specific arts processes enables students to create original artworks reflecting their evolving vision. Our program also fosters a broad cultural awareness of the visual arts in society. Graduating majors should be able to clearly express their ideas about art-making. In addition, their grasp of historical and contemporary aesthetic issues should inform their own work. We offer excellent facilities, small classes taught by a distinguished faculty, space to work, a guest lecturer series, and field trips to museums, galleries and artists' studios.

Seven options for the B.A. degree are offered: Art, Art History Option, B.A., Art, Art Studio Option, B.A., Art, Graphic Design Option, B.A., Art, Photography Option, B.A., Art, Pictorial Arts Option (Drawing/Painting/Printmaking), B.A., Art, Spatial Arts Option (Ceramics/Sculpture), B.A., and Art, Multimedia Option (Electronic Art), B.A. The major consists of 64-86 units; the B.A. requires 180 units.

The department also offers a Bachelor of Fine Arts (B.F.A.) degree. This is a professional degree offering students the opportunity to develop a higher level of expertise. It is often the degree of choice for those who intend to pursue graduate studies or attend other professional schools. It allows time for concentrated work within a specific art discipline: Art, Graphic Design Option, B.F.A., Art, Multimedia Option, B.F.A., Art, Photography Option, B.F.A. and Art, Traditional Arts Option, B.F.A. The major consists of 100-102 units; the B.F.A. requires 180-183 units.

The department is also part of the interdisciplinary graduate M.A. degree program in Multimedia (see Multimedia, M.A.).

The Art Department offers Art Studio Minor, Art History Minor, Photography Minor and Multimedia Minor. A Certificate Program in Art Museum and Gallery Studies is offered through the Division of Continuing and International Education.

Student Learning Outcomes

Students graduating with a B.A. or B.F.A. in Art from Cal State East Bay will be able to:

1. think creatively from the expression of an idea to the completion of a work of art;
2. apply art fundamentals successfully;
3. demonstrate an awareness of the history and context of art in relation to contemporary topics and social, political and cultural issues;
4. communicate an understanding for the use of an art medium for expression; and
5. communicate and apply technical proficiency in areas appropriate to their degree option to produce a cohesive body of work.

Career Possibilities

- Animator
- Artist
- Art Critic
- Art Educator
- Art Historian
- Arts Administrator
- Ceramicist
- Graphic Artist/Designer
- Multimedia Developer
- Museum/Gallery Curator
- Painter
- Photographer/Photojournalist
- Printmaker
- Sculptor
- Video Producer
- Web Developer

Major Requirements (B.F.A.)

The major consists of 100-102 units; the B.F.A. degree requires a total of 180-182 units.

Grade Requirement: Art majors must receive a grade of C- or better in each course used to satisfy a major requirement.

Admission and Degree Requirements

Applicants must meet university requirements for admission and must first be admitted to the B.A. degree program. In addition, they must meet the following requirements to apply for admission to the B.F.A. program:

1. Complete 30 units of Studio Art with a grade point average of 3.5 or better.

2. Submit a portfolio of work to the faculty B.F.A. committee along with a short statement summarizing their reasons for applying. Application reviews will be held once a year for admission the following year.
3. Maintain a minimum 3.5 GPA in all Art classes while in the program.
4. Prepare and install a final exhibition of their work in either the Art Department Galleries or outside exhibition spaces (or a portfolio for Electronic Art students) to be reviewed by the Art Department faculty to determine the candidate's professional competence in his/her area of concentration.

Traditional Arts Option (102 units)

1. Required Courses (34 units)

- ART 1020 - The Creative Process *Units: 4*
- ART 1113 - Drawing I *Units: 4*
- ART 3035 - Modern Art *Units: 4*
- ART 3411 - Advanced Survey of World Art *Units: 4*
- ART 3430 - Junior/Senior Seminar *Units: 2*
- ART 3440 - Visual Literacy *Units: 2*
- ART 4071 - Contemporary Art *Units: 4*
- ART 4710 - Senior Thesis *Units: 2*
- ART 4720 - Senior Seminar *Units: 2*
- ART 4730 - Senior Portfolio *Units: 2*
- One additional upper division art history course.

2. Elective Courses (68 units)

Courses selected from the following by advisement based upon student's choice of specialty area.

- ART 1112 - Ceramics I *Units: 4*
- ART 1114 - Painting I *Units: 4*
- ART 1115 - Printmaking I *Units: 4*
- ART 1116 - Introduction to Sculpture *Units: 4*
- ART 2701 - Black and White Photography I *Units: 4*
or crosslisted COMM 2701.
- ART 3141 - Drawing II *Units: 4*
- ART 3142 - Figure Drawing *Units: 4*
- ART 3212 - Painting II *Units: 4*
- ART 3213 - Painting III *Units: 4*
- ART 3316 - Advanced Sculpture *Units: 4*
- ART 3317 - Workshop in Spatial Arts *Units: 4*
- ART 3430 - Junior/Senior Seminar *Units: 2*
- ART 3440 - Visual Literacy *Units: 2*
- ART 3512 - Ceramics II *Units: 4*
- ART 3513 - Ceramics III *Units: 4*
- ART 3600 - Digital Photography II *Units: 4*
- ART 4143 - Advanced Drawing *Units: 4*
- ART 4857 - Advanced Printmaking *Units: 4*
- ART 4900 - Independent Study *Units: 1-4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S.

Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Biochemistry, B.A.

Program Description

The Department of Chemistry and Biochemistry provides a strong education in chemistry and biochemistry that prepares its students to function and thrive in our society. The department attempts to increase the problem solving and critical thinking skills of all students. Non-science students learn about the scientific and chemical aspects of everyday life that allow them to understand issues related to the environment, energy production, disease prevention, and nutrition. Students of the sciences learn the fundamentals of chemistry that control the interactions of elements and molecules which form the building blocks in nature. Chemistry majors receive extensive instruction in predicting chemical reactivity. Building on an understanding of mathematics, physics, and biology, chemistry majors receive a background in the major disciplines of chemistry including inorganic, analytical, organic, physical, and biochemistry. Students learn the protocols and techniques for working safely with chemicals. The department recognizes the importance of the pursuit of new knowledge in the development of skilled scientists and productive members of society, and encourages its students to participate in research projects and cooperative educational opportunities.

The undergraduate programs offered by the department include: Chemistry, B.S.; Biochemistry, B.S.; Chemistry, Forensic Science Option, B.S.; Chemistry, B.A.; Chemistry, Chemistry Education Option, B.A.; Biochemistry, B.A.; Biochemistry, Chemistry Education Option, B.A.; and a Chemistry Minor. Descriptions of these programs and their requirements are listed below. (See the Department of Chemistry and Biochemistry (Graduate) for descriptions of the department's Chemistry, M.S. and M.S. Option in Biochemistry.)

The Chemistry, B.S. degree is approved by the American Chemical Society (ACS). A certified degree is a valuable credential that serves as national-level recognition for completing a rigorous academic chemistry curriculum in an ACS-approved department. The extra rigor of an ACS certified degree is valued by both potential employers and graduate schools.

Mission Statement

It is imperative that CSUEB chemistry students possess sufficient theoretical and practical training in chemistry and biochemistry so that they will be able to assume the significant technical responsibilities required by the chemical and biotechnology industries that will employ them. It is important that our students are not only trained in chemistry (and biochemistry), but will become respected scientists and research technicians. In addition, it is important that students planning for entrance into Ph.D. programs or pre-professional programs are more than adequately prepared for entrance into these programs.

Student Learning Outcomes

Students graduating with a Bachelor's degree in Chemistry or Biochemistry from Cal State East Bay will be able to:

1. Demonstrate knowledge in the various areas of chemistry, including inorganic chemistry, analytical chemistry, organic chemistry, physical chemistry, and biochemistry.
2. Work effectively and safely in a laboratory environment to perform experimental procedures and operate modern chemical/biochemical instruments.
3. Use quantitative reasoning to analyze chemical problems and evaluate chemical data.
4. Write and speak clearly on chemical or biochemical issues.
5. Work collaboratively in teams to solve chemical problems.

Career Opportunities

Analytical Chemist
Biotechnologist
Biochemist
Biophysicist
Chemical Engineer
Chemist
Dietitian
Environmental Chemist

Food and Drug Inspector
Forensic Chemist
Geochemist
Geophysicist
Health Professional
Materials Scientist
Organic Chemist
Perfumer
Petrologist
Pharmacist
Pharmaceutical Chemist
Physical Chemist
Pollution Control
Professor
Public Health Educator
Quality Control Technician
Teacher
Water Purification Chemist

Features

The Department of Chemistry and Biochemistry employs highly qualified and experienced technical staff to assist faculty and students in their course and research experiences.

The Department of Chemistry and Biochemistry maintains laboratory equipment and instruments typical of comparable institutions. These include a 500 MHz nuclear magnetic resonance (NMR) spectrometer; UV-Visible (diode array), infrared and atomic absorption (AA: flame, graphite furnace and cold vapor) spectrophotometers; high performance liquid chromatograph (HPLC) and ion chromatograph (IC); an FTIR spectrometer; and capillary gas chromatograph/mass spectrometer (GC/MS). Other specialized equipment includes a research-grade dry box, growth chamber, anaerobic chamber, and environmental field sampling equipment. There are PC-controlled and various desktop versions of the HPLC and visible spectrometers. A molecular modeling facility is also available for instruction and research.

The university offers Cooperative Education coursework which provides chemically related employment opportunities and students may, with department approval, obtain credit for this work.

The Alchemist Club, a student affiliate of the American Chemical Society, is available to students majoring in Chemistry. They are active in many aspects of the department and provide free peer tutoring, participate in fund-raising for special projects, and take interesting field trips to local industries.

Preparation and Prerequisites

For Advanced Placement course equivalencies, see Registration. Prerequisite courses for all chemistry courses must be passed with a grade of "C-" or better. Requests for Grade Forgiveness will be allowed only on a space-available basis.

Major Requirements (B.A.)

B.A. Biochemistry

The Bachelor of Arts degree, major in Biochemistry, is designed to prepare students for employment in biochemistry, biotechnology, and related fields. It can also be utilized by students as a preparation for professional health-related programs, secondary school teaching, or non-traditional career paths (e.g., computer science, bioinformatics, business administration, and pharmaceutical sales). Students electing to pursue the B.A. in Biochemistry Degree could also earn a minor in another appropriate discipline such as biology. The major consists of 93-97 units; the B.A. degree requires a total of 180 units.

I. Lower Division (54 units)

- BIOL 1401 - Molecular and Cellular Biology *Units: 5*

- BIOL 1402 - Plant Biology *Units: 5*
- BIOL 1403 - Animal Biology *Units: 5*
- CHEM 1101 - General Chemistry *Units: 5*
- CHEM 1102 - General Chemistry *Units: 5*
- CHEM 1103 - General Chemistry *Units: 5*
- MATH 1304 - Calculus I *Units: 4*
- MATH 1305 - Calculus II *Units: 4*
- PHYS 2701 - Introductory Physics: Force, Mass and Motion *Units: 4*
- PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*
- PHYS 2703 - Introductory Physics: Light and Modern Physics *Units: 4*

One of the following:

- CS 1020 - Introduction to Computers *Units: 4*
- CS 1080 - Introduction to Media Computation *Units: 4*
- CS 1160 - Introduction to Computer Science I *Units: 4*

II. Upper Division (36-37 units)

- CHEM 3301 - Organic Chemistry *Units: 5*
- CHEM 3302 - Organic Chemistry *Units: 5*
- CHEM 3303 - Organic Chemistry *Units: 5*
- CHEM 3501 - Biophysical Chemistry *Units: 4*
or
- CHEM 3511 - Physical Chemistry Lecture *Units: 3*
- CHEM 4411 - General Biochemistry *Units: 4*
- CHEM 4412 - General Biochemistry *Units: 4*
- CHEM 4413 - General Biochemistry *Units: 4*
- CHEM 4430 - General Biochemistry Laboratory *Units: 4*
- CHEM 4431 - Advanced Biochemistry Laboratory *Units: 2*

III. Electives (3-6 units)

Select 3-6 units from the following list of upper division chemistry and biology courses:

- BIOL 3121 - Principles of Genetics *Units: 5*
- BIOL 3151 - Principles of Animal Physiology *Units: 5*
- BIOL 3405 - Microbiology *Units: 6*
- CHEM 3200 - Bioanalytical and Forensic Instrumentation *Units: 4*
- CHEM 4440 - Protein Structure *Units: 3*
- CHEM 4450 - Nucleic Acid Chemistry *Units: 3*
- CHEM 4460 - Major Organ Biochemistry *Units: 3*
- CHEM 4700 - Survey of Chemical Literature *Units: 2*
- CHEM 4810 - Undergraduate Research *Units: 2*
- CHEM 4900 - Independent Study *Units: 1-4*

Note:

*No more than two units of CHEM 4810 or CHEM 4900 or combined can be applied to the upper division chemistry electives.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Biochemistry, B.S.

Program Description

The Department of Chemistry and Biochemistry provides a strong education in chemistry and biochemistry that prepares its students to function and thrive in our society. The department attempts to increase the problem solving and critical thinking skills of all students. Non-science students learn about the scientific and chemical aspects of everyday life that allow them to understand issues related to the environment, energy production, disease prevention, and nutrition. Students of the sciences learn the fundamentals of chemistry that control the interactions of elements and molecules which form the building blocks in nature. Chemistry majors receive extensive instruction in predicting chemical reactivity. Building on an understanding of mathematics, physics, and biology, chemistry majors receive a background in the major disciplines of chemistry including inorganic, analytical, organic, physical, and biochemistry. Students learn the protocols and techniques for working safely with chemicals. The department recognizes the importance of the pursuit of new knowledge in the development of skilled scientists and productive members of society, and encourages its students to participate in research projects and cooperative educational opportunities.

The undergraduate programs offered by the department include: Chemistry, B.S.; Biochemistry, B.S.; Chemistry, Forensic Science Option, B.S.; Chemistry, B.A.; Chemistry, Chemistry Education Option, B.A.; Biochemistry, B.A.; Biochemistry, Chemistry Education Option, B.A.; and a Chemistry Minor. Descriptions of these programs and their requirements are listed below. (See the Department of Chemistry and Biochemistry (Graduate) for descriptions of the department's Chemistry, M.S. and M.S. Option in Biochemistry.)

The Chemistry, B.S. degree is approved by the American Chemical Society (ACS). A certified degree is a valuable credential that serves as national-level recognition for completing a rigorous academic chemistry curriculum in an ACS-approved department. The extra rigor of an ACS certified degree is valued by both potential employers and graduate schools.

Mission Statement

It is imperative that CSUEB chemistry students possess sufficient theoretical and practical training in chemistry and biochemistry so that they will be able to assume the significant technical responsibilities required by the chemical and biotechnology industries that will employ them. It is important that our students are not only trained in chemistry (and biochemistry), but will become respected scientists and research technicians. In addition, it is important that students planning for entrance into Ph.D. programs or pre-professional programs are more than adequately prepared for entrance into these programs.

Student Learning Outcomes

Students graduating with a Bachelor's degree in Chemistry or Biochemistry from Cal State East Bay will be able to:

1. Demonstrate knowledge in the various areas of chemistry, including inorganic chemistry, analytical chemistry, organic chemistry, physical chemistry, and biochemistry.
2. Work effectively and safely in a laboratory environment to perform experimental procedures and operate modern chemical/biochemical instruments.
3. Use quantitative reasoning to analyze chemical problems and evaluate chemical data.
4. Write and speak clearly on chemical or biochemical issues.
5. Work collaboratively in teams to solve chemical problems.

Career Opportunities

Analytical Chemist
Biotechnologist
Biochemist

Biophysicist
Chemical Engineer
Chemist
Dietitian
Environmental Chemist
Food and Drug Inspector
Forensic Chemist
Geochemist
Geophysicist
Health Professional
Materials Scientist
Organic Chemist
Perfumer
Petrologist
Pharmacist
Pharmaceutical Chemist
Physical Chemist
Pollution Control
Professor
Public Health Educator
Quality Control Technician
Teacher
Water Purification Chemist

Features

The Department of Chemistry and Biochemistry employs highly qualified and experienced technical staff to assist faculty and students in their course and research experiences.

The Department of Chemistry and Biochemistry maintains laboratory equipment and instruments typical of comparable institutions. These include a 500 MHz nuclear magnetic resonance (NMR) spectrometer; UV-Visible (diode array), infrared and atomic absorption (AA: flame, graphite furnace and cold vapor) spectrophotometers; high performance liquid chromatograph (HPLC) and ion chromatograph (IC); an FTIR spectrometer; and capillary gas chromatograph/mass spectrometer (GC/MS). Other specialized equipment includes a research-grade dry box, growth chamber, anaerobic chamber, and environmental field sampling equipment. There are PC-controlled and various desktop versions of the HPLC and visible spectrometers. A molecular modeling facility is also available for instruction and research.

The university offers Cooperative Education coursework which provides chemically related employment opportunities and students may, with department approval, obtain credit for this work.

The Alchemist Club, a student affiliate of the American Chemical Society, is available to students majoring in Chemistry. They are active in many aspects of the department and provide free peer tutoring, participate in fund-raising for special projects, and take interesting field trips to local industries.

Preparation and Prerequisites

For Advanced Placement course equivalencies, see Registration. Prerequisite courses for all chemistry courses must be passed with a grade of "C-" or better. Requests for Grade Forgiveness will be allowed only on a space-available basis.

Major Requirements (B.S.)

B.S. Biochemistry

The Bachelor of Science degree, major in Biochemistry, is designed to prepare students for entrance into graduate programs of biochemistry and medical schools. In addition, students completing this program are prepared to secure employment in the areas of biochemistry, biotechnology and related fields. This program is intended for students desiring the highest degree of technical proficiency in this specialized area at the undergraduate level. Since requirements are subject to change, consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 111-117 units, the B.S. degree requires a total of 180 units.

Sample Program

A Sample Program for this degree can be found at the department website: <http://www20.csueastbay.edu/csci/departments/chemistry/index.html>.

I. Lower Division (59-62 units)

- BIOL 1401 - Molecular and Cellular Biology *Units: 5*
 - BIOL 1402 - Plant Biology *Units: 5*
 - BIOL 1403 - Animal Biology *Units: 5*
 - CHEM 1101 - General Chemistry *Units: 5*
 - CHEM 1102 - General Chemistry *Units: 5*
 - CHEM 1103 - General Chemistry *Units: 5*
 - CHEM 2200 - Quantitative Analysis *Units: 5*
 - MATH 1304 - Calculus I *Units: 4*
 - MATH 1305 - Calculus II *Units: 4*
 - MATH 2304 - Calculus III *Units: 4*
-
- PHYS 2701 - Introductory Physics: Force, Mass and Motion *Units: 4*
 - PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*
 - PHYS 2703 - Introductory Physics: Light and Modern Physics *Units: 4*
- or*
- PHYS 1001 - General Physics: Newtonian Mechanics and Oscillations *Units: 5*
 - PHYS 1002 - General Physics: Thermodynamics and Optics *Units: 5*
 - PHYS 1003 - General Physics: Electromagnetism *Units: 5*

II. Upper Division (52-55 units)

- STAT 3031 - Statistical Methods in Biology *Units: 4*
- or*
- STAT 3502 - Statistical Inference I *Units: 4*
-
- CHEM 3301 - Organic Chemistry *Units: 5*
 - CHEM 3302 - Organic Chemistry *Units: 5*
 - CHEM 3303 - Organic Chemistry *Units: 5*
 - CHEM 3511 - Physical Chemistry Lecture *Units: 3*
 - CHEM 3512 - Physical Chemistry Lecture *Units: 3*
 - CHEM 3513 - Physical Chemistry Lecture *Units: 3*
 - CHEM 4411 - General Biochemistry *Units: 4*
 - CHEM 4412 - General Biochemistry *Units: 4*
 - CHEM 4413 - General Biochemistry *Units: 4*
 - CHEM 4430 - General Biochemistry Laboratory *Units: 4*
 - CHEM 4431 - Advanced Biochemistry Laboratory *Units: 2*

Two courses (6-10 units) chosen from the following:

- BIOL 3121 - Principles of Genetics *Units: 5*
- BIOL 4455 - Molecular Cell Biology *Units: 4*
- CHEM 4240 - Instrumental Methods of Analysis *Units: 4*
- CHEM 4440 - Protein Structure *Units: 3*
- CHEM 4450 - Nucleic Acid Chemistry *Units: 3*
- CHEM 4460 - Major Organ Biochemistry *Units: 3*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Biochemistry, Chemistry Education Option, B.A.

Program Description

The Department of Chemistry and Biochemistry provides a strong education in chemistry and biochemistry that prepares its students to function and thrive in our society. The department attempts to increase the problem solving and critical thinking skills of all students. Non-science students learn about the scientific and chemical aspects of everyday life that allow them to understand issues related to the environment, energy production, disease prevention, and nutrition. Students of the sciences learn the fundamentals of chemistry that control the interactions of elements and molecules which form the building blocks in nature. Chemistry majors receive extensive instruction in predicting chemical reactivity. Building on an understanding of mathematics, physics, and biology, chemistry majors receive a background in the major disciplines of chemistry including inorganic, analytical, organic, physical, and biochemistry. Students learn the protocols and techniques for working safely with chemicals. The department recognizes the importance of the pursuit of new knowledge in the development of skilled scientists and productive members of society, and encourages its students to participate in research projects and cooperative educational opportunities.

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Student Learning Outcomes

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Career Opportunities

Analytical Chemist
Biotechnologist
Biochemist

Biophysicist
Chemical Engineer
Chemist
Dietitian
Environmental Chemist
Food and Drug Inspector
Forensic Chemist
Geochemist
Geophysicist
Health Professional
Materials Scientist
Organic Chemist
Perfumer
Petrologist
Pharmacist
Pharmaceutical Chemist
Physical Chemist
Pollution Control
Professor
Public Health Educator
Quality Control Technician
Teacher
Water Purification Chemist

Features

The Department of Chemistry and Biochemistry employs highly qualified and experienced technical staff to assist faculty and students in their course and research experiences.

The Department of Chemistry and Biochemistry maintains laboratory equipment and instruments typical of comparable institutions. These include a 500 MHz nuclear magnetic resonance (NMR) spectrometer; UV-Visible (diode array), infrared and atomic absorption (AA: flame, graphite furnace and cold vapor) spectrophotometers; high performance liquid chromatograph (HPLC) and ion chromatograph (IC); an FTIR spectrometer; and capillary gas chromatograph/mass spectrometer (GC/MS). Other specialized equipment includes a research-grade dry box, growth chamber, anaerobic chamber, and environmental field sampling equipment. There are PC-controlled and various desktop versions of the HPLC and visible spectrometers. A molecular modeling facility is also available for instruction and research.

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Preparation and Prerequisites

For Advanced Placement course equivalencies, see Registration. Prerequisite courses for all chemistry courses must be passed with a grade of "C-" or better. Requests for Grade Forgiveness will be allowed only on a space-available basis.

Major Requirements (B.A.)

B.A. Biochemistry, Option in Chemistry Education

The Bachelor of Arts degree, major in Biochemistry with an option in Chemistry Education, is designed for students interested in a career teaching chemistry at the high school level, but also prepares students to work as biochemists in an industrial setting. This program will prepare graduates to enter a single subject credential program. The major is also compatible with participation in the Bachelor's Plus Early Pathway program, which allows completion of both the Bachelor's degree and a teaching credential in four years. The major in Biochemistry with a Chemistry Education option consists of 111 units, the B.A. degree requires a total of 180 units.

1. Lower Division (59 units)

- BIOL 1401 - Molecular and Cellular Biology *Units: 5*
- BIOL 1402 - Plant Biology *Units: 5*
- BIOL 1403 - Animal Biology *Units: 5*
- CHEM 1101 - General Chemistry *Units: 5*
- CHEM 1102 - General Chemistry *Units: 5*
- CHEM 1103 - General Chemistry *Units: 5*

- CS 1020 - Introduction to Computers *Units: 4*
or
- CS 1160 - Introduction to Computer Science I *Units: 4*

- GEOL 1000 - Earth Systems Science *Units: 5*
- MATH 1304 - Calculus I *Units: 4*
- MATH 1305 - Calculus II *Units: 4*
- PHYS 2701 - Introductory Physics: Force, Mass and Motion *Units: 4*
- PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*
- PHYS 2703 - Introductory Physics: Light and Modern Physics *Units: 4*

2. Upper Division (52 units)

- CHEM 3301 - Organic Chemistry *Units: 5*
- CHEM 3302 - Organic Chemistry *Units: 5*
- CHEM 3303 - Organic Chemistry *Units: 5*
- CHEM 3501 - Biophysical Chemistry *Units: 4*
- CHEM 4400 - Instructional Activities in Chemistry *Units: 2*
- CHEM 4411 - General Biochemistry *Units: 4*
- CHEM 4412 - General Biochemistry *Units: 4*
- CHEM 4413 - General Biochemistry *Units: 4*
- CHEM 4430 - General Biochemistry Laboratory *Units: 4*
- CHEM 4431 - Advanced Biochemistry Laboratory *Units: 2*
- CHEM 4601 - Environmental Chemistry I *Units: 4*
- CHEM 4700 - Survey of Chemical Literature *Units: 2*
- PHIL 3335 - Science, Technology and Values *Units: 4*
- TED 3001 - Exploring Education *Units: 3*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Biological Science, Biology Education Option, B.A.

Program Description

Biology is concerned with living matter in all its forms, responses, and interactions. It deals with the study of anything that has been or is alive: microbes, all plants, and all animals, including humans. The science of biology includes a large number of highly integrated sub-disciplines such as microbiology, genetics, ecology, evolution, physiology, systematics, and behavior. Biologists must draw upon a wide variety of academic

disciplines to make observations and draw conclusions, and well-trained biologists have solid backgrounds in chemistry, mathematics, computer science, statistics, physics, and the humanities, as required by graduate programs and professional schools, to meet the demands of professions in the life sciences.

The Department of Biological Sciences offers a diversified curriculum in the life sciences. Courses are designed for biology majors with specific degree objectives, for students seeking applied technical training, and for non-major students with general interest in biological subjects. Undergraduate programs will prepare students for both graduate work and for a diversity of careers. Biology majors may enter specialized or general careers in life science and find themselves working in laboratories, offices, the field, farms, administrative posts, academic institutions, industry, government agencies, private foundations, botanic gardens and zoos, wildlife preserves, and elsewhere.

Student Learning Outcomes

Students graduating with a B.S. or B.A. in Biological Science from Cal State East Bay will be able to:

1. demonstrate how evolutionary processes give rise to the diversity and unity of life, from genomes to ecosystems;
2. explain the relationship between structure and function across all levels of biological organization, from ions to ecosystems;
3. clearly communicate biological information in a variety of formats (written, oral, graphical, computational) using a style appropriate for the intended audience;
4. apply methods of scientific inquiry-specifically, students will be able to formulate testable hypotheses, collect and analyze data, and report conclusions;
5. gather, interpret, and evaluate published scientific information.

Career Possibilities

- Administrator
- Biotechnologist
- Botanist
- Cell Biologist
- Consultant
- Dentist
- Ecologist
- Entomologist
- Environmentalist
- Genetic Engineer
- Physiologist
- Geneticist
- Health Scientist
- Lab Assistant
- Marine Biologist
- Medical Doctor
- Medical Technologist

- Pharmacologist
- Physical Therapist
- Population Biologist
- Researcher
- Teacher
- Space Biologist
- Technical Sales
- Technical Writer
- Toxicologist
- Veterinarian
- Zoologist

Features

Classes are offered on the Hayward campus in well-equipped facilities, at the Moss Landing Marine Laboratories located on Monterey Bay, and at a number of field locations throughout the San Francisco Bay Area, including the South San Francisco Bay National Wildlife Refuge Field Station, and the Garin Reserve adjacent to campus.

A program in Biomedical Laboratory Sciences is offered to qualify students for California hospital traineeships which lead to state licensure as medical technologists.

Preparation

A student who has successfully completed an advanced placement course in biology in high school and has earned a score of "3," "4" or "5" on the Advanced Placement Examination will be granted 10 units of credit in place of BIOL 1001-BIOL 1002 and BIOL 2040 or, if student is a Biology Major, 10 units in place of BIOL 1401 and BIOL 1403. No Advanced Placement credit is given for BIOL 1402.

Prerequisite courses for all Biology courses must be passed with a grade of "C-" or better. All requests for Grade Forgiveness are subject to space availability, with priority given to newly enrolled students.

Marine Science

Moss Landing Marine Laboratories

Cal State East Bay does not offer an undergraduate degree in Marine Science. These undergraduate courses may fulfill major requirements for qualified upper division and graduate students. Please consult your major department. Such students can plan their academic schedules to provide for one or more terms at the Moss Landing Marine Laboratories and will be considered as in-residence at Cal State East Bay. Because Moss Landing Marine Laboratories operates on the semester system, careful planning is required for scheduling these semester unit courses. Students may also take one or two all-day courses at Moss Landing to supplement their on-campus schedule. (The Admissions Office has information for concurrent registration.)

For additional information on the Marine Sciences program at Moss Landing Marine Laboratories, see Marine Science in the Graduate section of this catalog.

Major Requirements (B.A.)

The Bachelor of Arts major program should be considered by students wishing broad experience in biology as well as specialized course work tailored to their special interests. Students planning careers in education, biological interpretative work, natural history programs, health-related vocations, or seeking generalized biological training may find this program most adaptable to their needs. However, the B.A. degree major in many cases will not provide the required courses for admission to graduate or professional schools. The major consists of 90 units; the B.A. degree requires a minimum of 180 units.

Biology Education Option (90 units)

I. Physical Sciences and Mathematics (41 units)

A. Chemistry (23 units)

- CHEM 1101 - General Chemistry *Units: 5*
- CHEM 1102 - General Chemistry *Units: 5*
- CHEM 1103 - General Chemistry *Units: 5*
- CHEM 2301 - Survey of Organic Chemistry *Units: 4*
- CHEM 2302 - Survey of Organic Chemistry *Units: 4*

B. Physics (5 units)

- PHYS 1700 - Elementary Physics *Units: 4*
- PHYS 1780 - Elementary Physics Laboratory *Units: 1*

C. Mathematics (8 units)

- MATH 1304 - Calculus I *Units: 4*
- STAT 3031 - Statistical Methods in Biology *Units: 4*

D. Earth Science (5 units)

- GEOL 1000 - Earth Systems Science *Units: 5*
or
- GEOL 1001 - Introduction to the Earth Sciences *Units: 4*
and
- GEOL 1002 - Earth Sciences Laboratory *Units: 1*

II. Biological Sciences (42 units)

A. Lower Division (20 units)

- BIOL 1401 - Molecular and Cellular Biology *Units: 5*
- BIOL 1402 - Plant Biology *Units: 5*
- BIOL 1403 - Animal Biology *Units: 5*
- BIOL 2025 - Introduction to Microbiology *Units: 5*

B. Upper Division (22 units)

- BIOL 3110 - Principles of Ecology *Units: 4*
- BIOL 3121 - Principles of Genetics *Units: 5*
- BIOL 3122 - Principles of Developmental Genetic Analysis *Units: 4*

- BIOL 3130 - Principles of Evolutionary Biology *Units: 4*
- BIOL 3151 - Principles of Animal Physiology *Units: 5*

III. Teacher Education (7 units)

- PHIL 3335 - Science, Technology and Values *Units: 4*
- TED 3001 - Exploring Education *Units: 3*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Biological Science, Cell and Molecular Biology Option, B.S.

Program Description

Biology is concerned with living matter in all its forms, responses, and interactions. It deals with the study of anything that has been or is alive: microbes, all plants, and all animals, including humans. The science of biology includes a large number of highly integrated sub-disciplines such as microbiology, genetics, ecology, evolution, physiology, systematics, and behavior. Biologists must draw upon a wide variety of academic disciplines to make observations and draw conclusions, and well-trained biologists have solid backgrounds in chemistry, mathematics, computer science, statistics, physics, and the humanities, as required by graduate programs and professional schools, to meet the demands of professions in the life sciences.

The Department of Biological Sciences offers a diversified curriculum in the life sciences. Courses are designed for biology majors with specific degree objectives, for students seeking applied technical training, and for non-major students with general interest in biological subjects. Undergraduate programs will prepare students for both graduate work and for a diversity of careers. Biology majors may enter specialized or general careers in life science and find themselves working in laboratories, offices, the field, farms, administrative posts, academic institutions, industry, government agencies, private foundations, botanic gardens and zoos, wildlife preserves, and elsewhere.

Student Learning Outcomes

Students graduating with a B.S. or B.A. in Biological Science from Cal State East Bay will be able to:

1. demonstrate how evolutionary processes give rise to the diversity and unity of life, from genomes to ecosystems;
2. explain the relationship between structure and function across all levels of biological organization, from ions to ecosystems;
3. clearly communicate biological information in a variety of formats (written, oral, graphical, computational) using a style appropriate for the intended audience;
4. apply methods of scientific inquiry-specifically, students will be able to formulate testable hypotheses, collect and analyze data, and report conclusions;
5. gather, interpret, and evaluate published scientific information.

Career Possibilities

- Administrator
- Biotechnologist
- Botanist
- Cell Biologist

- Consultant
- Dentist
- Ecologist
- Entomologist
- Environmentalist
- Genetic Engineer
- Physiologist
- Geneticist
- Health Scientist
- Lab Assistant
- Marine Biologist
- Medical Doctor
- Medical Technologist
- Pharmacologist
- Physical Therapist
- Population Biologist
- Researcher
- Teacher
- Space Biologist
- Technical Sales
- Technical Writer
- Toxicologist
- Veterinarian
- Zoologist

Features

Classes are offered on the Hayward campus in well-equipped facilities, at the Moss Landing Marine Laboratories located on Monterey Bay, and at a number of field locations throughout the San Francisco Bay Area, including the South San Francisco Bay National Wildlife Refuge Field Station, and the Garin Reserve adjacent to campus.

A program in Biomedical Laboratory Sciences is offered to qualify students for California hospital traineeships which lead to state licensure as medical technologists.

Preparation

A student who has successfully completed an advanced placement course in biology in high school and has earned a score of "3," "4" or "5" on the Advanced Placement Examination will be granted 10 units of credit in place of BIOL 1001-BIOL 1002 and BIOL 2040 or, if student is a Biology Major, 10 units in place of BIOL 1401 and BIOL 1403. No Advanced Placement credit is given for BIOL 1402.

Prerequisite courses for all Biology courses must be passed with a grade of "C-" or better. All requests for Grade Forgiveness are subject to space availability, with priority given to newly enrolled students.

Marine Science

Moss Landing Marine Laboratories

Cal State East Bay does not offer an undergraduate degree in Marine Science. These undergraduate courses may fulfill major requirements for qualified upper division and graduate students. Please consult your major department. Such students can plan their academic schedules to provide for one or more terms at the Moss Landing Marine Laboratories and will be considered as in-residence at Cal State East Bay. Because Moss Landing Marine Laboratories operates on the semester system, careful planning is required for scheduling these semester unit courses. Students may also take one or two all-day courses at Moss Landing to supplement their on-campus schedule. (The Admissions Office has information for concurrent registration.)

For additional information on the Marine Sciences program at Moss Landing Marine Laboratories, see Marine Science in the Graduate section of this catalog.

Major Requirements (B.S.)

The B.S. degree should be considered by students anticipating careers in biology or the health sciences that require graduate school, professional school, or specialized training programs such as biotechnology and medical technology. All students wishing to enter medicine, dentistry, veterinary medicine, or biomedical laboratory positions should obtain a Bachelor of Science degree. Students wishing to teach in secondary schools may want to consider the B.A. degree. The B.S. degree requires a minimum of 180 units; 187 units with the Forensic Science Option.

Note: Requirements are subject to change, so consult your advisor in the Department of Biological Sciences for clarification and interpretation of your major requirements. Because the upper division requirements of the B.S. degree are not large, students also need to carefully track their progress toward the 60 upper division units required for graduation.

For the B.S. degree, students must select an option.

Cell and Molecular Biology Option (106 units)

I. Physical Sciences and Mathematics (58 units)

- CHEM 1101 - General Chemistry *Units: 5*
- CHEM 1102 - General Chemistry *Units: 5*
- CHEM 1103 - General Chemistry *Units: 5*
- CHEM 3301 - Organic Chemistry *Units: 5*
- CHEM 3302 - Organic Chemistry *Units: 5*
- CHEM 3303 - Organic Chemistry *Units: 5*
- CHEM 4411 - General Biochemistry *Units: 4*
- CHEM 4412 - General Biochemistry *Units: 4*

- MATH 1300 - Trigonometry and Analytic Geometry *Units: 4*
or
- MATH 1304 - Calculus I *Units: 4*
(Students should take the most advanced course for which they are qualified. Biologists continuing on to graduate work should complete MATH 1305 as a minimum.)

- PHYS 2701 - Introductory Physics: Force, Mass and Motion *Units: 4*
- PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*

- PHYS 2703 - Introductory Physics: Light and Modern Physics *Units: 4*
- STAT 3031 - Statistical Methods in Biology *Units: 4*

II. Biological Sciences (29 units)

- BIOL 1401 - Molecular and Cellular Biology *Units: 5*
- BIOL 1402 - Plant Biology *Units: 5*
- BIOL 1403 - Animal Biology *Units: 5*
- BIOL 3121 - Principles of Genetics *Units: 5*
- BIOL 3122 - Principles of Developmental Genetic Analysis *Units: 4*
- BIOL 3151 - Principles of Animal Physiology *Units: 5*

III. Concentration Required Courses (7 units)

- BIOL 4455 - Molecular Cell Biology *Units: 4*
- BIOL 4456 - Molecular Techniques *Units: 3*

IV. Concentration Electives (12 units)

A minimum of 12 units must be selected from the following:

- BIOL 3405 - Microbiology *Units: 6*
- BIOL 4430 - Immunology *Units: 4*
- BIOL 4450 - Cell Culture Techniques *Units: 4*
- BIOL 4485 - PCR, DNA Sequencing and Fragment Analysis *Units: 4*
- BIOL 4490 - Bioinformatics *Units: 4*
- CHEM 4430 - General Biochemistry Laboratory *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Biological Science, Ecology and Conservation Biology Option, B.S.

Program Description

Biology is concerned with living matter in all its forms, responses, and interactions. It deals with the study of anything that has been or is alive: microbes, all plants, and all animals, including humans. The science of biology includes a large number of highly integrated sub-disciplines such as microbiology, genetics, ecology, evolution, physiology, systematics, and behavior. Biologists must draw upon a wide variety of academic disciplines to make observations and draw conclusions, and well-trained biologists have solid backgrounds in chemistry, mathematics, computer science, statistics, physics, and the humanities, as required by graduate programs and professional schools, to meet the demands of professions in the life sciences.

The Department of Biological Sciences offers a diversified curriculum in the life sciences. Courses are designed for biology majors with specific degree objectives, for students seeking applied technical training, and for non-major students with general interest in biological subjects. Undergraduate programs will prepare students for both graduate work and for a diversity of careers. Biology majors may enter specialized or general careers in life science and find themselves working in laboratories, offices, the field, farms, administrative posts, academic institutions, industry, government agencies, private foundations, botanic gardens and zoos, wildlife preserves, and elsewhere.

Student Learning Outcomes

Students graduating with a B.S. or B.A. in Biological Science from Cal State East Bay will be able to:

1. demonstrate how evolutionary processes give rise to the diversity and unity of life, from genomes to ecosystems;
2. explain the relationship between structure and function across all levels of biological organization, from ions to ecosystems;
3. clearly communicate biological information in a variety of formats (written, oral, graphical, computational) using a style appropriate for the intended audience;
4. apply methods of scientific inquiry-specifically, students will be able to formulate testable hypotheses, collect and analyze data, and report conclusions;
5. gather, interpret, and evaluate published scientific information.

Career Possibilities

- Administrator
- Biotechnologist
- Botanist
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- Consultant
- Dentist
- Ecologist
- Entomologist
- Environmentalist
- Genetic Engineer
- Physiologist
- Geneticist
- Health Scientist
- Lab Assistant
- Marine Biologist
- Medical Doctor
- Medical Technologist
- Pharmacologist
- Physical Therapist
- Population Biologist
- Researcher
- Teacher
- Space Biologist

- Technical Sales
- Technical Writer
- Toxicologist
- Veterinarian
- Zoologist

Features

Classes are offered on the Hayward campus in well-equipped facilities, at the Moss Landing Marine Laboratories located on Monterey Bay, and at a number of field locations throughout the San Francisco Bay Area, including the South San Francisco Bay National Wildlife Refuge Field Station, and the Garin Reserve adjacent to campus.

A program in Biomedical Laboratory Sciences is offered to qualify students for California hospital traineeships which lead to state licensure as medical technologists.

Preparation

A student who has successfully completed an advanced placement course in biology in high school and has earned a score of "3," "4" or "5" on the Advanced Placement Examination will be granted 10 units of credit in place of BIOL 1001-BIOL 1002 and BIOL 2040 or, if student is a Biology Major, 10 units in place of BIOL 1401 and BIOL 1403. No Advanced Placement credit is given for BIOL 1402.

Prerequisite courses for all Biology courses must be passed with a grade of "C-" or better. All requests for Grade Forgiveness are subject to space availability, with priority given to newly enrolled students.

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Major Requirements (B.S.)

The B.S. degree should be considered by students anticipating careers in biology or the health sciences that require graduate school, professional school, or specialized training programs such as biotechnology and medical technology. All students wishing to enter medicine, dentistry, veterinary medicine, or biomedical laboratory positions should obtain a Bachelor of Science degree. Students wishing to teach in secondary schools may want to consider the B.A. degree. The B.S. degree requires a minimum of 180 units; 187 units with the Forensic Science Option.

Note: Requirements are subject to change, so consult your advisor in the Department of Biological Sciences for clarification and interpretation of your major requirements. Because the upper division requirements of the B.S. degree are not large, students also need to carefully track their progress toward the 60 upper division units required for graduation.

For the B.S. degree, students must select an option.

Ecology and Conservation Biology Option (101-108 units)

I. Physical Sciences and Mathematics (40-47 units)

- CHEM 1101 - General Chemistry *Units: 5*
- CHEM 1102 - General Chemistry *Units: 5*
- CHEM 1103 - General Chemistry *Units: 5*

- CHEM 2301 - Survey of Organic Chemistry *Units: 4*
- CHEM 2302 - Survey of Organic Chemistry *Units: 4*
or
- CHEM 3301 - Organic Chemistry *Units: 5*
- CHEM 3302 - Organic Chemistry *Units: 5*
- CHEM 3303 - Organic Chemistry *Units: 5*

- CHEM 3400 - Introductory Biochemistry *Units: 4*
or
- CHEM 4411 - General Biochemistry *Units: 4*

- MATH 1300 - Trigonometry and Analytic Geometry *Units: 4*
or
- MATH 1304 - Calculus I *Units: 4*

- PHYS 1700 - Elementary Physics *Units: 4*
and
- PHYS 1780 - Elementary Physics Laboratory *Units: 1*
(PHYS 2701, PHYS 2702, and PHYS 2703 series {4, 4, 4,} may be substituted but only 5 of 12 units will apply to major.)

- STAT 3031 - Statistical Methods in Biology *Units: 4*

II. Biological Sciences (37 units)

- BIOL 1401 - Molecular and Cellular Biology *Units: 5*
- BIOL 1402 - Plant Biology *Units: 5*
- BIOL 1403 - Animal Biology *Units: 5*
- BIOL 3110 - Principles of Ecology *Units: 4*
- BIOL 3121 - Principles of Genetics *Units: 5*
- BIOL 3130 - Principles of Evolutionary Biology *Units: 4*
- BIOL 3151 - Principles of Animal Physiology *Units: 5*
- BIOL 4351 - Biological Conservation *Units: 4*

III. Concentration Courses (24 units)

Ecology Courses

Select at least one course (minimum 4 units) from the following:

- BIOL 4130 - Biogeography *Units: 4*
or
- GEOG 4130 - Biogeography *Units: 4*

- BIOL 4530 - Ecological Methods *Units: 4*

Organismal/Systematics Courses

Select at least 20 units from the following (can include one course from the "Ecology Courses" listed above):

- BIOL 3122 - Principles of Developmental Genetic Analysis *Units: 4*
- BIOL 3216 - Freshwater Environments *Units: 4*
- BIOL 3405 - Microbiology *Units: 6*
- BIOL 3441 - Biomedical Parasitology *Units: 4*
- BIOL 4142 - Microbial Symbioses *Units: 4*
- BIOL 4340 - Environmental Microbiology *Units: 4*
- BIOL 4513 - Animal Senses *Units: 4*
- BIOL 4516 - Environmental Animal Physiology *Units: 4*
- BIOL 4518 - Animal Behavior *Units: 4*
- BIOL 4565 - Ornithology *Units: 4*
- BIOL 4575 - Herpetology *Units: 4*
- BIOL 4583 - Vertebrate Biology *Units: 4*

- BIOL 4130 - Biogeography *Units: 4*
or
- GEOG 4130 - Biogeography *Units: 4*

- ENVT 3400 - Environmental Resource Analysis *Units: 4*
- ENVT 4100 - Environmental Impact Analysis *Units: 4*
- GEOL 3400 - General Oceanography *Units: 4*
- MSC 4103 - Marine Ecology *Units: 6* (offered at Moss Landing Marine Laboratories)
- MSC 4105 - Marine Science Diving *Units: 4.5* (offered at Moss Landing Marine Laboratories)
- MSC 4112 - Marine Birds and Mammals *Units: 6* (offered at Moss Landing Marine Laboratories)
- MSC 4113 - Marine Ichthyology *Units: 6* (offered at Moss Landing Marine Laboratories)
- MSC 4124 - Marine Invertebrate Zoology I *Units: 6* (offered at Moss Landing Marine Laboratories)
- MSC 4131 - Marine Botany *Units: 6* (offered at Moss Landing Marine Laboratories)
- MSC 4144 - Biological Oceanography *Units: 6* (offered at Moss Landing Marine Laboratories)

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Biological Science, Forensic Science Option, B.S.

Program Description

Biology is concerned with living matter in all its forms, responses, and interactions. It deals with the study of anything that has been or is alive: microbes, all plants, and all animals, including humans. The science of biology includes a large number of highly integrated sub-disciplines such as microbiology, genetics, ecology, evolution, physiology, systematics, and behavior. Biologists must draw upon a wide variety of academic disciplines to make observations and draw conclusions, and well-trained biologists have solid backgrounds in chemistry, mathematics, computer science, statistics, physics, and the humanities, as required by graduate programs and professional schools, to meet the demands of professions in the life sciences.

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general careers in life science and find themselves working in laboratories, offices, the field, farms, administrative posts, academic institutions, industry, government agencies, private foundations, botanic gardens and zoos, wildlife preserves, and elsewhere.

Student Learning Outcomes

Students graduating with a B.S. or B.A. in Biological Science from Cal State East Bay will be able to:

1. demonstrate how evolutionary processes give rise to the diversity and unity of life, from genomes to ecosystems;
2. explain the relationship between structure and function across all levels of biological organization, from ions to ecosystems;
3. clearly communicate biological information in a variety of formats (written, oral, graphical, computational) using a style appropriate for the intended audience;
4. apply methods of scientific inquiry-specifically, students will be able to formulate testable hypotheses, collect and analyze data, and report conclusions;
5. gather, interpret, and evaluate published scientific information.

Career Possibilities

- Administrator
- Biotechnologist
- Botanist
- Cell Biologist
- Consultant
- Dentist
- Ecologist
- Entomologist
- Environmentalist
- Genetic Engineer
- Physiologist
- Geneticist
- Health Scientist
- Lab Assistant
- Marine Biologist
- Medical Doctor
- Medical Technologist
- Pharmacologist
- Physical Therapist
- Population Biologist
- Researcher

- Teacher
- Space Biologist
- Technical Sales
- Technical Writer
- Toxicologist
- Veterinarian
- Zoologist

Features

Classes are offered on the Hayward campus in well-equipped facilities, at the Moss Landing Marine Laboratories located on Monterey Bay, and at a number of field locations throughout the San Francisco Bay Area, including the South San Francisco Bay National Wildlife Refuge Field Station, and the Garin Reserve adjacent to campus.

A program in Biomedical Laboratory Sciences is offered to qualify students for California hospital traineeships which lead to state licensure as medical technologists.

Preparation

A student who has successfully completed an advanced placement course in biology in high school and has earned a score of "3," "4" or "5" on the Advanced Placement Examination will be granted 10 units of credit in place of BIOL 1001-BIOL 1002 and BIOL 2040 or, if student is a Biology Major, 10 units in place of BIOL 1401 and BIOL 1403. No Advanced Placement credit is given for BIOL 1402.

Prerequisite courses for all Biology courses must be passed with a grade of "C-" or better. All requests for Grade Forgiveness are subject to space availability, with priority given to newly enrolled students.

Marine Science

Moss Landing Marine Laboratories

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For additional information on the Marine Sciences program at Moss Landing Marine Laboratories, see Marine Science in the Graduate section of this catalog.

Major Requirements (B.S.)

The B.S. degree should be considered by students anticipating careers in biology or the health sciences that require graduate school, professional school, or specialized training programs such as biotechnology and medical technology. All students wishing to enter medicine, dentistry, veterinary medicine, or biomedical laboratory positions should obtain a Bachelor of Science degree. Students wishing to teach in secondary schools may want to consider the B.A. degree. The B.S. degree requires a minimum of 180 units; 187 units with the Forensic Science Option.

Note: Requirements are subject to change, so consult your advisor in the Department of Biological Sciences for clarification and interpretation of your major requirements. Because the upper division requirements of the B.S. degree are not large, students also need to carefully track their progress toward the 60 upper division units required for graduation.

For the B.S. degree, students must select one of the following options:

Forensic Science Option (111-113 units)

Completion of the Forensic Science Option also qualifies the student to receive a minor in Chemistry which consists of 38 units of coursework included in the option.

I. Physical Sciences and Mathematics (63 units)

- CHEM 1101 - General Chemistry *Units: 5*
- CHEM 1102 - General Chemistry *Units: 5*
- CHEM 1103 - General Chemistry *Units: 5*
- CHEM 3301 - Organic Chemistry *Units: 5*
- CHEM 3302 - Organic Chemistry *Units: 5*
- CHEM 3303 - Organic Chemistry *Units: 5*
- CHEM 2200 - Quantitative Analysis *Units: 5*
- CHEM 3200 - Bioanalytical and Forensic Instrumentation *Units: 4*
- CHEM 3400 - Introductory Biochemistry *Units: 4*

- MATH 1300 - Trigonometry and Analytic Geometry *Units: 4*
or
- MATH 1304 - Calculus I *Units: 4*

- PHYS 2701 - Introductory Physics: Force, Mass and Motion *Units: 4*
- PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*
- PHYS 2703 - Introductory Physics: Light and Modern Physics *Units: 4*
- STAT 3031 - Statistical Methods in Biology *Units: 4*

II. Biological Sciences (29 units)

- BIOL 1401 - Molecular and Cellular Biology *Units: 5*
- BIOL 1402 - Plant Biology *Units: 5*
- BIOL 1403 - Animal Biology *Units: 5*
- BIOL 2010 - Human Physiology and Anatomy I *Units: 5*
- BIOL 3121 - Principles of Genetics *Units: 5*
- BIOL 4485 - PCR, DNA Sequencing and Fragment Analysis *Units: 4*

III. Criminal Justice (11 units)

- BIOL 4830 - Seminar in Forensic Research *Units: 1*
- CHEM 4830 - Seminar in Forensic Research *Units: 1*
- CRJA 4830 - Seminar in Forensic Research *Units: 1*
- CRJA 2200 - Basic Criminal Investigation *Units: 4*
- CRJA 3800 - Comparative Evidence and Its Evaluation *Units: 4*

IV. Concentration Electives (8-10 units)

Select at least one course (minimum 4 units) from the following:

- BIOL 2020 - Human Physiology and Anatomy II *Units: 5*
- BIOL 3405 - Microbiology *Units: 6*

- BIOL 4160 - Medical Physiology *Units: 4*
- BIOL 4490 - Bioinformatics *Units: 4*

And at least one course (minimum 4 units) from the following:

- CRJA 3400 - Advanced Criminal Investigation *Units: 4*
- CRJA 3500 - Criminal Identification *Units: 4*
- CRJA 4124 - Sex Crime Investigation *Units: 4*

Other Degree Requirements

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Biological Science, General Biology Option, B.A.

Program Description

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Student Learning Outcomes

Students graduating with a B.S. or B.A. in Biological Science from Cal State East Bay will be able to:

1. demonstrate how evolutionary processes give rise to the diversity and unity of life, from genomes to ecosystems;
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3. clearly communicate biological information in a variety of formats (written, oral, graphical, computational) using a style appropriate for the intended audience;
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Career Possibilities

- Administrator
- Biotechnologist
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- Dentist
- Ecologist
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- Genetic Engineer
- Physiologist
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- Health Scientist
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- Marine Biologist
- Medical Doctor
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Marine Science

Moss Landing Marine Laboratories

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For additional information on the Marine Sciences program at Moss Landing Marine Laboratories, see Marine Science in the Graduate section of this catalog.

Major Requirements (B.A.)

The Bachelor of Arts major program should be considered by students wishing broad experience in biology as well as specialized course work tailored to their special interests. Students planning careers in education, biological interpretative work, natural history programs, health-related vocations, or seeking generalized biological training may find this program most adaptable to their needs. However, the B.A. degree major in many cases will not provide the required courses for admission to graduate or professional schools. The major consists of 90 units; the B.A. degree requires a minimum of 180 units.

General Biology Option (90 units)

The Option in General Biology for the B.A. Biological Science consists of 90 units. The B.A. Biological Science degree requires a total of 180 units. The University requires 72 units of GE. However, the B.A. Biological Science with the Option in General Biology can incorporate up to 16 units of GE into the major.

I. Physical Sciences and Mathematics Core (32 units)

A. Chemistry (12 units)

- CHEM 1601 - Basic Chemistry for the Health Sciences *Units: 4*
- CHEM 1602 - Basic Chemistry for the Health Sciences *Units: 4* [GE Areas B1, B3, B5]
- CHEM 3400 - Introductory Biochemistry *Units: 4*

B. Physics (12 units)

- PHYS 2701 - Introductory Physics: Force, Mass and Motion *Units: 4*
- PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*
- PHYS 2703 - Introductory Physics: Light and Modern Physics *Units: 4*

C. Mathematics (8 units)

- MATH 1304 - Calculus I *Units: 4*
- STAT 3031 - Statistical Methods in Biology *Units: 4*

II. Biological Sciences Core (37 units)

A. Lower Division (15 units)

- BIOL 1401 - Molecular and Cellular Biology *Units: 5*
- BIOL 1402 - Plant Biology *Units: 5*
- BIOL 1403 - Animal Biology *Units: 5*

B. Upper Division (22 units)

- BIOL 3110 - Principles of Ecology *Units: 4*
- BIOL 3121 - Principles of Genetics *Units: 5*
- BIOL 3122 - Principles of Developmental Genetic Analysis *Units: 4*
- BIOL 3130 - Principles of Evolutionary Biology *Units: 4*
- BIOL 3151 - Principles of Animal Physiology *Units: 5*

III. Upper Division Electives (21 units)

- Any upper division biology course can be applied, except BIOL 3020.
- Can include a maximum of 8 units from departments outside of Biological Science but not more than one course per department. Approved courses are listed below.
- Earth & Environmental Science: GEOL 3400, ENSC 4140, ENSC 4200
- Philosophy: PHIL 3151, PHIL 3152, PHIL 3153 [GE Area C4]
- Consultation with a faculty advisor is strongly recommended to review the suitability of this degree program for the desired professional goal.

Other Degree Requirements

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Biological Science, General Biology Option, B.S.

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- Lab Assistant
- Marine Biologist
- Medical Doctor
- Medical Technologist
- Pharmacologist
- Physical Therapist
- Population Biologist
- Researcher
- Teacher
- Space Biologist

- Technical Sales
- Technical Writer
- Toxicologist
- Veterinarian
- Zoologist

Features

Classes are offered on the Hayward campus in well-equipped facilities, at the Moss Landing Marine Laboratories located on Monterey Bay, and at a number of field locations throughout the San Francisco Bay Area, including the South San Francisco Bay National Wildlife Refuge Field Station, and the Garin Reserve adjacent to campus.

A program in Biomedical Laboratory Sciences is offered to qualify students for California hospital traineeships which lead to state licensure as medical technologists.

Preparation

A student who has successfully completed an advanced placement course in biology in high school and has earned a score of "3," "4" or "5" on the Advanced Placement Examination will be granted 10 units of credit in place of BIOL 1001-BIOL 1002 and BIOL 2040 or, if student is a Biology Major, 10 units in place of BIOL 1401 and BIOL 1403. No Advanced Placement credit is given for BIOL 1402.

Prerequisite courses for all Biology courses must be passed with a grade of "C-" or better. All requests for Grade Forgiveness are subject to space availability, with priority given to newly enrolled students.

Marine Science

Moss Landing Marine Laboratories

Cal State East Bay does not offer an undergraduate degree in Marine Science. These undergraduate courses may fulfill major requirements for qualified upper division and graduate students. Please consult your major department. Such students can plan their academic schedules to provide for one or more terms at the Moss Landing Marine Laboratories and will be considered as in-residence at Cal State East Bay. Because Moss Landing Marine Laboratories operates on the semester system, careful planning is required for scheduling these semester unit courses. Students may also take one or two all-day courses at Moss Landing to supplement their on-campus schedule. (The Admissions Office has information for concurrent registration.)

For additional information on the Marine Sciences program at Moss Landing Marine Laboratories, see Marine Science in the Graduate section of this catalog.

Major Requirements (B.S.)

The B.S. degree should be considered by students anticipating careers in biology or the health sciences that require graduate school, professional school, or specialized training programs such as biotechnology and medical technology. All students wishing to enter medicine, dentistry, veterinary medicine, or biomedical laboratory positions should obtain a Bachelor of Science degree. Students wishing to teach in secondary schools may want to consider the B.A. degree. The B.S. degree requires a minimum of 180 units; 187 units with the Forensic Science Option.

Note: Requirements are subject to change, so consult your advisor in the Department of Biological Sciences for clarification and interpretation of your major requirements. Because the upper division requirements of the B.S. degree are not large, students also need to carefully track their progress toward the 60 upper division units required for graduation.

For the B.S. degree, students must select an option.

General Biology Option (100 units)

The General Biology Option in Biological Science provides a broad background in the basic sciences and in biology. It may be completed in as few as 100 units, allowing graduation with a total of 180 units minimum.

I. Physical Sciences and Mathematics (47 units)

- CHEM 1101 - General Chemistry *Units: 5*
- CHEM 1102 - General Chemistry *Units: 5*
- CHEM 1103 - General Chemistry *Units: 5*

- CHEM 2301 - Survey of Organic Chemistry *Units: 4*
- CHEM 2302 - Survey of Organic Chemistry *Units: 4*
(CHEM 3301, CHEM 3302, CHEM 3303 may be substituted, but only 8 units apply to major.)

- CHEM 3400 - Introductory Biochemistry *Units: 4*
or
- CHEM 4411 - General Biochemistry *Units: 4*

- MATH 1300 - Trigonometry and Analytic Geometry *Units: 4*
or
- MATH 1304 - Calculus I *Units: 4*
(Students should take the most advanced course for which they are qualified. Biologists continuing on to graduate work should complete MATH 1305 as a minimum.)

- STAT 3031 - Statistical Methods in Biology *Units: 4*
- PHYS 2701 - Introductory Physics: Force, Mass and Motion *Units: 4*
- PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*
- PHYS 2703 - Introductory Physics: Light and Modern Physics *Units: 4*

II. Biological Sciences (37 units)

- BIOL 1401 - Molecular and Cellular Biology *Units: 5*
- BIOL 1402 - Plant Biology *Units: 5*
- BIOL 1403 - Animal Biology *Units: 5*
- BIOL 3110 - Principles of Ecology *Units: 4*
- BIOL 3121 - Principles of Genetics *Units: 5*
- BIOL 3122 - Principles of Developmental Genetic Analysis *Units: 4*
- BIOL 3130 - Principles of Evolutionary Biology *Units: 4*
- BIOL 3151 - Principles of Animal Physiology *Units: 5*

III. Advanced Biological Science Electives (16 units)

Upper division electives in biological science.

(May include up to 4 units of approved courses in sciences other than Biology and pertinent to the student's area of special interest. The approved courses are CHEM 4412 and GEOL 3400; other courses subject to approval by petitioning the department prior to registration.)

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S.

Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Biological Science, Microbiology/Biomedical Laboratory Sciences Option, B.S.

Program Description

Biology is concerned with living matter in all its forms, responses, and interactions. It deals with the study of anything that has been or is alive: microbes, all plants, and all animals, including humans. The science of biology includes a large number of highly integrated sub-disciplines such as microbiology, genetics, ecology, evolution, physiology, systematics, and behavior. Biologists must draw upon a wide variety of academic disciplines to make observations and draw conclusions, and well-trained biologists have solid backgrounds in chemistry, mathematics, computer science, statistics, physics, and the humanities, as required by graduate programs and professional schools, to meet the demands of professions in the life sciences.

The Department of Biological Sciences offers a diversified curriculum in the life sciences. Courses are designed for biology majors with specific degree objectives, for students seeking applied technical training, and for non-major students with general interest in biological subjects. Undergraduate programs will prepare students for both graduate work and for a diversity of careers. Biology majors may enter specialized or general careers in life science and find themselves working in laboratories, offices, the field, farms, administrative posts, academic institutions, industry, government agencies, private foundations, botanic gardens and zoos, wildlife preserves, and elsewhere.

Student Learning Outcomes

Students graduating with a B.S. or B.A. in Biological Science from Cal State East Bay will be able to:

1. demonstrate how evolutionary processes give rise to the diversity and unity of life, from genomes to ecosystems;
2. explain the relationship between structure and function across all levels of biological organization, from ions to ecosystems;
3. clearly communicate biological information in a variety of formats (written, oral, graphical, computational) using a style appropriate for the intended audience;
4. apply methods of scientific inquiry-specifically, students will be able to formulate testable hypotheses, collect and analyze data, and report conclusions;
5. gather, interpret, and evaluate published scientific information.

Career Possibilities

- Administrator
- Biotechnologist
- Botanist
- Cell Biologist
- Consultant
- Dentist
- Ecologist
- Entomologist
- Environmentalist
- Genetic Engineer
- Physiologist
- Geneticist

- Health Scientist
- Lab Assistant
- Marine Biologist
- Medical Doctor
- Medical Technologist
- Pharmacologist
- Physical Therapist
- Population Biologist
- Researcher
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The B.S. degree should be considered by students anticipating careers in biology or the health sciences that require graduate school, professional school, or specialized training programs such as biotechnology and medical technology. All students wishing to enter medicine, dentistry, veterinary medicine, or biomedical laboratory positions should obtain a Bachelor of Science degree. Students wishing to teach in secondary schools may want to consider the B.A. degree. The B.S. degree requires a minimum of 180 units; 187 units with the Forensic Science Option.

Note: Requirements are subject to change, so consult your advisor in the Department of Biological Sciences for clarification and interpretation of your major requirements. Because the upper division requirements of the B.S. degree are not large, students also need to carefully track their progress toward the 60 upper division units required for graduation.

For the B.S. degree, students must select an option.

Microbiology/Biomedical Laboratory Sciences Option (105 units)

The Microbiology/Biomedical Laboratory Sciences option leading to a B.S. degree in Biological Science prepares students for further training after graduation in State approved hospital laboratories as required for State licensure of Medical Technologists. Traineeships are available to qualified graduates in laboratories throughout California. Trainee positions are highly competitive. This option is recommended for students contemplating work in public health, industrial microbiology, quality control, research, and graduate work in related fields.

I. Physical Sciences and Mathematics Core (58 units)

- CHEM 1101 - General Chemistry *Units: 5*
- CHEM 1102 - General Chemistry *Units: 5*
- CHEM 1103 - General Chemistry *Units: 5*
- CHEM 3301 - Organic Chemistry *Units: 5*
- CHEM 3302 - Organic Chemistry *Units: 5*
- CHEM 3303 - Organic Chemistry *Units: 5*
- CHEM 4411 - General Biochemistry *Units: 4*
- CHEM 4412 - General Biochemistry *Units: 4*
- MATH 1304 - Calculus I *Units: 4*
- STAT 3031 - Statistical Methods in Biology *Units: 4*
- PHYS 2701 - Introductory Physics: Force, Mass and Motion *Units: 4*
- PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*
- PHYS 2703 - Introductory Physics: Light and Modern Physics *Units: 4*

II. Biological Sciences Core (31 units)

- BIOL 1401 - Molecular and Cellular Biology *Units: 5*
- BIOL 1402 - Plant Biology *Units: 5*
- BIOL 1403 - Animal Biology *Units: 5*
- BIOL 3121 - Principles of Genetics *Units: 5*
- BIOL 3151 - Principles of Animal Physiology *Units: 5*
- BIOL 3405 - Microbiology *Units: 6*

III. Microbiology/Biomedical Laboratory Sciences Core (Minimum of 16 units from the list below)

In addition to the minimum units required in the Microbiology/Biomedical Laboratory Sciences Core, students who intend to apply for Clinical Laboratory Scientists licensing programs are required to take CHEM 2200 - Quantitative Analysis.

- BIOL 3430 - Hematology *Units: 4* ⁴
- BIOL 3441 - Biomedical Parasitology *Units: 4*
- BIOL 4142 - Microbial Symbioses *Units: 4*
- BIOL 4143 - Molecular Microbiology *Units: 4*
- BIOL 4340 - Environmental Microbiology *Units: 4*
- BIOL 4405 - Microbial Physiology and Biochemistry *Units: 4*
- BIOL 4413 - Medical Microbiology *Units: 6* ⁴
- BIOL 4430 - Immunology *Units: 4* ⁴
- BIOL 4435 - Water Quality and Human Health *Units: 4*
- BIOL 4441 - Principles of Virology *Units: 4*

Note:

⁴ Required electives for Microbiology/Biomedical Laboratory Sciences Option students who intend to apply for Clinical Laboratory Scientists licensing programs.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Biological Science, Physiology Option, B.S.

Program Description

Biology is concerned with living matter in all its forms, responses, and interactions. It deals with the study of anything that has been or is alive: microbes, all plants, and all animals, including humans. The science of biology includes a large number of highly integrated sub-disciplines such as microbiology, genetics, ecology, evolution, physiology, systematics, and behavior. Biologists must draw upon a wide variety of academic disciplines to make observations and draw conclusions, and well-trained biologists have solid backgrounds in chemistry, mathematics, computer science, statistics, physics, and the humanities, as required by graduate programs and professional schools, to meet the demands of professions in the life sciences.

The Department of Biological Sciences offers a diversified curriculum in the life sciences. Courses are designed for biology majors with specific degree objectives, for students seeking applied technical training, and for non-major students with general interest in biological subjects.

Undergraduate programs will prepare students for both graduate work and for a diversity of careers. Biology majors may enter specialized or general careers in life science and find themselves working in laboratories, offices, the field, farms, administrative posts, academic institutions, industry, government agencies, private foundations, botanic gardens and zoos, wildlife preserves, and elsewhere.

Student Learning Outcomes

Students graduating with a B.S. or B.A. in Biological Science from Cal State East Bay will be able to:

1. demonstrate how evolutionary processes give rise to the diversity and unity of life, from genomes to ecosystems;
2. explain the relationship between structure and function across all levels of biological organization, from ions to ecosystems;
3. clearly communicate biological information in a variety of formats (written, oral, graphical, computational) using a style appropriate for the

intended audience;

4. apply methods of scientific inquiry-specifically, students will be able to formulate testable hypotheses, collect and analyze data, and report conclusions;

5. gather, interpret, and evaluate published scientific information.

Career Possibilities

- Administrator
- Biotechnologist
- Botanist
- Cell Biologist
- Consultant
- Dentist
- Ecologist
- Entomologist
- Environmentalist
- Genetic Engineer
- Physiologist
- Geneticist
- Health Scientist
- Lab Assistant
- Marine Biologist
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- Physical Therapist
- Population Biologist
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- Teacher
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- Technical Writer
- Toxicologist

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Marine Science

Moss Landing Marine Laboratories

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For additional information on the Marine Sciences program at Moss Landing Marine Laboratories, see Marine Science in the Graduate section of this catalog.

Major Requirements (B.S.)

The B.S. degree should be considered by students anticipating careers in biology or the health sciences that require graduate school, professional school, or specialized training programs such as biotechnology and medical technology. All students wishing to enter medicine, dentistry, veterinary medicine, or biomedical laboratory positions should obtain a Bachelor of Science degree. Students wishing to teach in secondary schools may want to consider the B.A. degree. The B.S. degree requires a minimum of 180 units; 187 units with the Forensic Science Option.

Note: Requirements are subject to change, so consult your advisor in the Department of Biological Sciences for clarification and interpretation of your major requirements. Because the upper division requirements of the B.S. degree are not large, students also need to carefully track their progress toward the 60 upper division units required for graduation.

For the B.S. degree, students must select an option.

Physiology Option (99-107 units)

I. Physical Sciences and Mathematics (47-54 units)

- CHEM 1101 - General Chemistry *Units:* 5

- CHEM 1102 - General Chemistry *Units: 5*
- CHEM 1103 - General Chemistry *Units: 5*
- CHEM 2301 - Survey of Organic Chemistry *Units: 4*
- CHEM 2302 - Survey of Organic Chemistry *Units: 4*
or
- CHEM 3301 - Organic Chemistry *Units: 5*
- CHEM 3302 - Organic Chemistry *Units: 5*
- CHEM 3303 - Organic Chemistry *Units: 5*
- CHEM 3400 - Introductory Biochemistry *Units: 4*
or
- CHEM 4411 - General Biochemistry *Units: 4*
- MATH 1304 - Calculus I *Units: 4*
- PHYS 2701 - Introductory Physics: Force, Mass and Motion *Units: 4*
- PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*
- PHYS 2703 - Introductory Physics: Light and Modern Physics *Units: 4*
- STAT 3031 - Statistical Methods in Biology *Units: 4*

II. Biological Sciences (29 units)

- BIOL 1401 - Molecular and Cellular Biology *Units: 5*
- BIOL 1402 - Plant Biology *Units: 5*
- BIOL 1403 - Animal Biology *Units: 5*
- BIOL 3110 - Principles of Ecology *Units: 4*
or
- BIOL 3130 - Principles of Evolutionary Biology *Units: 4*
- BIOL 3121 - Principles of Genetics *Units: 5*
- BIOL 3151 - Principles of Animal Physiology *Units: 5*

III. Concentration Courses (16 units)

Select a minimum of four courses (16 units) from the following:

- BIOL 4150 - Mammalian Physiology *Units: 4*
- BIOL 4160 - Medical Physiology *Units: 4*
- BIOL 4500 - Quantitative Methods in Physiology *Units: 2*
- BIOL 4504 - Comparative Physiology *Units: 4*
- BIOL 4505 General Endocrinology *Units: 4*
- BIOL 4506 - Animal Physiology Laboratory *Units: 3*
- BIOL 4510 - Neurobiology *Units: 4*
- BIOL 4516 - Environmental Animal Physiology *Units: 4*
- CHEM 4460 - Major Organ Biochemistry *Units: 3* (prerequisite CHEM 4413) *Units: 3*

IV. Upper Division Electives (7-8 units)

Select at least two additional courses from the previous list or any other upper division biology course applicable to the B.S. degree, for a minimum of 99 units.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Business Administration, Accounting Option, B.S.

Program Description

The Business Administration major program is structured around a set of core courses enabling students to develop general business perspective and skills. Students are required to choose an area of specialization (option) corresponding to their desired career path. Each option allows students flexibility to customize their program by choosing option elective courses. The program is designed to encourage students to actively participate in shaping their program to fit their individual needs.

The undergraduate and the graduate programs in Business Administration are accredited by the Association to Advance Collegiate Schools of Business International (AACSB).

Undergraduate Student Success & Service Center

CBE's Undergraduate Student Success & Service Center (USSSC) provides services that support and promote student success. For more information and advising, contact the CBE USSSC in VBT 129, call (510) 885-3323 or email cbe_ssc@csueastbay.edu

Student Learning Outcomes

Students graduating with a B.S. in Business Administration from Cal State East Bay will be able to:

1. Recognize and recall foundation knowledge relevant to business management.
2. Integrate and think critically across functional areas to solve business problems.
3. Understand and apply quantitative methods and tools in evaluating business problems.
4. Apply technology to analyze business problems.
5. Apply effective oral communication skills.
6. Apply effective written communication skills.
7. Apply effective team working skills.
8. Understand ethical issues and derive solutions for ethical problems.

Business Administration, B.S.

Major Requirements (B.S.)

Expiration of Courses

Upper division major/option requirement courses will expire ten years after completion of the quarter in which they are earned. Expired courses cannot be used to fulfill degree requirements and must be replaced by current credits. Requests for waivers of the ten-year limit for extenuating circumstances, other than mere failure to register, are made to the department chair in which the course resides and the director of undergraduate programs.

Transfer of courses

Upper division courses will only be considered for equivalency or transfer credit if they are from AACSB accredited institutions. Exceptions will be made for programs that have current and signed agreements with the College of Business and Economics.

The B.S. degree requires a total of 180 units. The Business Administration major consists of 97-105 units. The Business Administration major requires three sets of courses: (I) lower division core courses with a grade of "C" or better for each course, (II) upper division core courses, and (III)

courses to fulfill option requirements. The numbers appearing in () following each course title refer to units; in most cases this is 4 since the typical course has 4 units.

I. Lower Division (29-33 units)

- ACCT 2251 - Introduction to Financial Accounting *Units: 4*
- ACCT 2253 - Introduction to Managerial Accounting *Units: 4*
- ACCT 2701 - Legal Environment of Business *Units: 4*
- ECON 2301 - Principles of Microeconomics *Units: 4*
- ECON 2302 - Principles of Macroeconomics *Units: 4*
- MATH 1810 - Mathematics for Business and Social Sciences *Units: 4*
- STAT 1000 - Elements of Probability and Statistics *Units: 5*
or STAT 2010 Elements of Statistics for Business and Economics
- ITM 1270 - Fundamentals of Information Systems and Applications *Units: 4 (must be completed with a grade of "C" or better).*
or
Digital proficiency can be fulfilled in one of the following ways:
 - Pass the Digital Proficiency test administered quarterly by the Department of Management, College of Business and Economics. Contact CBE Undergraduate Student Success & Service Center for details regarding the test.
 - Receive a total scaled score of 50 or higher on the "Information Systems and Computer Applications" test administered by College Board's College-Level Examination Program (CLEP). Note that the total scaled scores fall between 20 and 80. Your total scaled score must be at least 50, which does not mean 50%. Browse http://www.collegeboard.com/student/testing/clep/ex_isca.html for all details regarding the "Information Systems and Computer Applications" test.

Note:

Mathematics Course: Students who plan to pursue one of the more quantitative options or a graduate program are encouraged to enroll in MATH 1304 Calculus I, in place of MATH 1810.

II. Upper Division Core Requirements (44 units)

All lower division core requirements must be completed prior to enrollment in upper division courses.

- ECON 3107 - Global Economic Analysis *Units: 4*
or MGMT 4670 *Multinational Business*
- ECON 3551 - Managerial Economics and Business Strategy *Units: 4*
- FIN 3300 - Financial Management *Units: 4*
- ITM 3060 - Information Technology Management *Units: 4*
- MGMT 3100 - Decision Science *Units: 4*
- MGMT 3560 - Business and Professional Ethics *Units: 4*
or cross-listed: PHIL 3560
- MGMT 3614 - Organizational Behavior *Units: 4*
- MGMT 3620 - Operations Management *Units: 4*
- MGMT 4500 - Business, Government, and Society *Units: 4*
or ACCT 4911 *Accounting Ethics*
- MGMT 4650 - Seminar in Strategic Business Management *Units: 4*
- MKTG 3401 - Marketing Principles *Units: 4*

Note:

- *Neither ECON 3107 nor MGMT 4670 can be used as an elective for any BSBA options.*
- *ACCT 4911 counts towards the requirement of 4 quarter units of accounting ethics on the Ethics Study for California CPA (Certified Public Accountant) licensure. Students who choose the Accounting option are strongly encouraged to take ACCT 4911.*

III. Option Requirements (24-28 units)

Select a Business Administration option listed in the Programs of Study chapter of this catalog. A student cannot have both an option and a minor in the same area.

Accounting Option (28 units)

Accounting plays an important role in business decision-making. The function of accounting is to identify, measure, and communicate relevant information for decision-making purposes. There is a high demand for professional accountants. The program is rigorous, challenging, interesting, and rewarding. The program will prepare students for accounting career opportunities in private, public, and non-profit sectors, and will aid in the preparation for professional examinations.

Required courses:

- ACCT 3211 - Intermediate Financial Accounting I *Units: 4*
- ACCT 3212 - Intermediate Financial Accounting II *Units: 4*
- ACCT 3213 - Intermediate Financial Accounting III *Units: 4*
- ACCT 3220 - Tax Accounting: Fundamentals and Individuals *Units: 4*
- ACCT 4250 - Auditing I *Units: 4*

Additional upper division courses:

- Select two ACCT upper division (3000-4000) level courses beyond those listed as required (excluding ACCT 3228, 3898, 4227, 4900) (8)

Notes:

- ACCT 4223 may be used as a substitute for one of the following (if substituted, ACCT 4223 cannot be used as accounting option electives):
 - ACCT 2701 (4) or MGMT 4500 (4)
- Students who need 36 units to qualify and prepare for the CPA exam are recommended to take the following courses as electives:
 - ACCT 3170 (4)
 - ACCT 3230 (4)
 - ACCT 3280 (4)
 - ACCT 4211 (4)
 - ACCT 4220 (4)
- Students interested in a career in internal audit are recommended to take the following courses as electives:
 - ACCT 4252 (4)
 - ACCT 4253 (4)
- Students interested in a career in taxation are recommended to take the following courses as electives:
 - ACCT 4220 (4)
 - ACCT 4221 (4)

Other Degree Requirements

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Business Administration, B.S.

Program Description

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2. Integrate and think critically across functional areas to solve business problems.
3. Understand and apply quantitative methods and tools in evaluating business problems.
4. Apply technology to analyze business problems.
5. Apply effective oral communication skills.
6. Apply effective written communication skills.
7. Apply effective team working skills.
8. Understand ethical issues and derive solutions for ethical problems.

Sample Programs

In order to ensure that prerequisite courses are taken in the proper sequence, contact the CBE Student Service Center at <http://www20.csueastbay.edu/cbe/centers/student-services-center.html>. This site provides information on sample programs and curriculum planning flow charts for each option in the business administration major.

Business Administration, B.S.

Major Requirements (B.S.)

Expiration of Courses

Upper division major/option requirement courses will expire ten years after completion of the quarter in which they are earned. Expired courses cannot be used to fulfill degree requirements and must be replaced by current credits. Requests for waivers of the ten-year limit for extenuating circumstances, other than mere failure to register, are made to the department chair in which the course resides and the director of undergraduate programs.

Transfer of courses

Upper division courses will only be considered for equivalency or transfer credit if they are from AACSB accredited institutions. Exceptions will be made for programs that have current and signed agreements with the College of Business and Economics.

The B.S. degree requires a total of 180 units. The Business Administration major consists of 97-105 units. The Business Administration major requires three sets of courses: (I) lower division core courses with a grade of "C" or better for each course, (II) upper division core courses, and (III) courses to fulfill option requirements. The numbers appearing in () following each course title refer to units; in most cases this is 4 since the typical course has 4 units.

I. Lower Division (29-33 units)

- ACCT 2251 - Introduction to Financial Accounting *Units: 4*

- ACCT 2253 - Introduction to Managerial Accounting *Units: 4*
- ACCT 2701 - Legal Environment of Business *Units: 4*
- ECON 2301 - Principles of Microeconomics *Units: 4*
- ECON 2302 - Principles of Macroeconomics *Units: 4*
- MATH 1810 - Mathematics for Business and Social Sciences *Units: 4*
- STAT 1000 - Elements of Probability and Statistics *Units: 5*
or STAT 2010 Elements of Statistics for Business and Economics
- ITM 1270 - Fundamentals of Information Systems and Applications *Units: 4 (must be completed with a grade of "C" or better).*
or

Digital proficiency can be fulfilled in one of the following ways:

- Pass the Digital Proficiency test administered quarterly by the Department of Management, College of Business and Economics. Contact CBE Undergraduate Student Success & Service Center for details regarding the test.
- Receive a total scaled score of 50 or higher on the "Information Systems and Computer Applications" test administered by College Board's College-Level Examination Program (CLEP). Note that the total scaled scores fall between 20 and 80. Your total scaled score must be at least 50, which does not mean 50%. Browse http://www.collegeboard.com/student/testing/clep/ex_isca.html for all details regarding the "Information Systems and Computer Applications" test.

Note:

Mathematics Course: Students who plan to pursue one of the more quantitative options or a graduate program are encouraged to enroll in MATH 1304 Calculus I, in place of MATH 1810.

II. Upper Division Core Requirements (44 units)

All lower division core requirements must be completed prior to enrollment in upper division courses.

- ECON 3107 - Global Economic Analysis *Units: 4*
or MGMT 4670 *Multinational Business*
- ECON 3551 - Managerial Economics and Business Strategy *Units: 4*
- FIN 3300 - Financial Management *Units: 4*
- ITM 3060 - Information Technology Management *Units: 4*
- MGMT 3100 - Decision Science *Units: 4*
- MGMT 3560 - Business and Professional Ethics *Units: 4*
or cross-listed: PHIL 3560
- MGMT 3614 - Organizational Behavior *Units: 4*
- MGMT 3620 - Operations Management *Units: 4*
- MGMT 4500 - Business, Government, and Society *Units: 4*
or ACCT 4911 *Accounting Ethics*
- MGMT 4650 - Seminar in Strategic Business Management *Units: 4*
- MKTG 3401 - Marketing Principles *Units: 4*

Note:

- *Neither ECON 3107 nor MGMT 4670 can be used as an elective for any BSBA options.*
- *ACCT 4911 counts towards the requirement of 4 quarter units of accounting ethics on the Ethics Study for California CPA (Certified Public Accountant) licensure. Students who choose the Accounting option are strongly encouraged to take ACCT 4911.*

III. Option Requirements (24-28 units)

Select a Business Administration option listed in the Programs of Study chapter of this catalog. A student cannot have both an option and a minor in the same area.

From Outside the College of Business and Economics

In place of the option requirement, a student may choose to complete a minor from outside the College of Business and Economics. A second major from outside the College and interdisciplinary minors such as Advertising, Communication Skills, and International Business may also be substituted for the option requirement. The Minor program must be approved by both the Minor Advisor of the College of Business and Economics and an advisor from the area of the minor. Note that courses taken for a minor that is to be used in lieu of an option must be taken for letter grades rather than CR/NC.

The number of units required for the Business Administration major under this alternative is the combined 85-89 units of the lower division and upper division Business Administration courses plus the additional units necessary for the chosen, approved minor. Note that, where otherwise appropriate, units used to satisfy the requirements of a minor can also meet general education and/or major requirements.

The degree conferred under this alternative will be "Bachelor of Science, Major in Business Administration, Minor in"

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Business Administration, Business Economics Option, B.S.

Program Description

The Business Administration major program is structured around a set of core courses enabling students to develop general business perspective and skills. Students are required to choose an area of specialization (option) corresponding to their desired career path. Each option allows students flexibility to customize their program by choosing option elective courses. The program is designed to encourage students to actively participate in shaping their program to fit their individual needs.

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Student Learning Outcomes

Students graduating with a B.S. in Business Administration from Cal State East Bay will be able to:

1. Recognize and recall foundation knowledge relevant to business management.
2. Integrate and think critically across functional areas to solve business problems.
3. Understand and apply quantitative methods and tools in evaluating business problems.
4. Apply technology to analyze business problems.
5. Apply effective oral communication skills.
6. Apply effective written communication skills.
7. Apply effective team working skills.
8. Understand ethical issues and derive solutions for ethical problems.

Business Administration, B.S.

Major Requirements (B.S.)

Expiration of Courses

Upper division major/option requirement courses will expire ten years after completion of the quarter in which they are earned. Expired courses cannot be used to fulfill degree requirements and must be replaced by current credits. Requests for waivers of the ten-year limit for extenuating circumstances, other than mere failure to register, are made to the department chair in which the course resides and the director of undergraduate programs.

Transfer of courses

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I. Lower Division (29-33 units)

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- STAT 1000 - Elements of Probability and Statistics *Units: 5*
or STAT 2010 Elements of Statistics for Business and Economics
- ITM 1270 - Fundamentals of Information Systems and Applications *Units: 4 (must be completed with a grade of "C" or better).*
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Note:

Mathematics Course: Students who plan to pursue one of the more quantitative options or a graduate program are encouraged to enroll in MATH 1304 Calculus I, in place of MATH 1810.

II. Upper Division Core Requirements (44 units)

All lower division core requirements must be completed prior to enrollment in upper division courses.

- ECON 3107 - Global Economic Analysis *Units: 4*
or MGMT 4670 *Multinational Business*
- ECON 3551 - Managerial Economics and Business Strategy *Units: 4*
- FIN 3300 - Financial Management *Units: 4*
- ITM 3060 - Information Technology Management *Units: 4*
- MGMT 3100 - Decision Science *Units: 4*
- MGMT 3560 - Business and Professional Ethics *Units: 4*
or cross-listed: PHIL 3560
- MGMT 3614 - Organizational Behavior *Units: 4*

- MGMT 3620 - Operations Management *Units: 4*
- MGMT 4500 - Business, Government, and Society *Units: 4*
or ACCT 4911 *Accounting Ethics*
- MGMT 4650 - Seminar in Strategic Business Management *Units: 4*
- MKTG 3401 - Marketing Principles *Units: 4*

Note:

- *Neither ECON 3107 nor MGMT 4670 can be used as an elective for any BSBA options.*
- *ACCT 4911 counts towards the requirement of 4 quarter units of accounting ethics on the Ethics Study for California CPA (Certified Public Accountant) licensure. Students who choose the Accounting option are strongly encouraged to take ACCT 4911.*

III. Option Requirements (24-28 units)

Select a Business Administration option listed in the Programs of Study chapter of this catalog. A student cannot have both an option and a minor in the same area.

Business Economics Option (24 units)

The Business Economics option concentrates on the economic aspects of business decision-making. The coursework emphasizes forecasting product demand, setting product prices, estimating production costs, calculating firm profitability, evaluating investment alternatives, and assessing the effects of government regulations and industry competition on firm performance and strategy. Students selecting this option will be prepared for careers in banking, finance, economic forecasting, and business economics. The option also provides an excellent background for graduate training in economics and business. Students in this option are encouraged to take ECON 3107 instead of MGMT 4670, and STAT 2010 instead of STAT 1000 as part of their required core coursework.

Required courses:

- ECON 3005 - Macro-Economic Theory *Units: 4*
or ECON 3006 (4)
Note: Only one of 3005 and 3006 can be counted towards the option.
- ECON 3310 - Money, Banking, and Financial Intermediaries *Units: 4*
- ECON 4400 - Introduction to Econometrics *Units: 4*

Additional upper division courses:

Select three upper division economics courses beyond the required courses listed, excluding ECON 3000 and ECON 3001. (12)

Note:

Students who have already taken MGMT 4670 as part of the BSBA core cannot use ECON 3107 as one of the electives for the Business Economics Option.

A student cannot receive credit for both an Economics major or minor and the Business Economics option in the Business Administration major.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Business Administration, Entrepreneurship Option, B.S.

Program Description

The Business Administration major program is structured around a set of core courses enabling students to develop general business perspective and skills. Students are required to choose an area of specialization (option) corresponding to their desired career path. Each option allows students flexibility to customize their program by choosing option elective courses. The program is designed to encourage students to actively participate in shaping their program to fit their individual needs.

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2. Integrate and think critically across functional areas to solve business problems.
3. Understand and apply quantitative methods and tools in evaluating business problems.
4. Apply technology to analyze business problems.
5. Apply effective oral communication skills.
6. Apply effective written communication skills.
7. Apply effective team working skills.
8. Understand ethical issues and derive solutions for ethical problems.

Business Administration, B.S.

Major Requirements (B.S.)

Expiration of Courses

Upper division major/option requirement courses will expire ten years after completion of the quarter in which they are earned. Expired courses cannot be used to fulfill degree requirements and must be replaced by current credits. Requests for waivers of the ten-year limit for extenuating circumstances, other than mere failure to register, are made to the department chair in which the course resides and the director of undergraduate programs.

Transfer of courses

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The B.S. degree requires a total of 180 units. The Business Administration major consists of 97-105 units. The Business Administration major requires three sets of courses: (I) lower division core courses with a grade of "C" or better for each course, (II) upper division core courses, and (III) courses to fulfill option requirements. The numbers appearing in () following each course title refer to units; in most cases this is 4 since the typical course has 4 units.

I. Lower Division (29-33 units)

- ACCT 2251 - Introduction to Financial Accounting *Units: 4*
- ACCT 2253 - Introduction to Managerial Accounting *Units: 4*
- ACCT 2701 - Legal Environment of Business *Units: 4*
- ECON 2301 - Principles of Microeconomics *Units: 4*
- ECON 2302 - Principles of Macroeconomics *Units: 4*
- MATH 1810 - Mathematics for Business and Social Sciences *Units: 4*
- STAT 1000 - Elements of Probability and Statistics *Units: 5*
or STAT 2010 Elements of Statistics for Business and Economics
- ITM 1270 - Fundamentals of Information Systems and Applications *Units: 4 (must be completed with a grade of "C" or better).*
or
Digital proficiency can be fulfilled in one of the following ways:
 - Pass the Digital Proficiency test administered quarterly by the Department of Management, College of Business and Economics. Contact CBE Undergraduate Student Success & Service Center for details regarding the test.
 - Receive a total scaled score of 50 or higher on the "Information Systems and Computer Applications" test administered by College Board's College-Level Examination Program (CLEP). Note that the total scaled scores fall between 20 and 80. Your total scaled score must be at least 50, which does not mean 50%. Browse http://www.collegeboard.com/student/testing/clep/ex_isca.html for all details regarding the "Information Systems and Computer Applications" test.

Note:

Mathematics Course: Students who plan to pursue one of the more quantitative options or a graduate program are encouraged to enroll in MATH 1304 Calculus I, in place of MATH 1810.

II. Upper Division Core Requirements (44 units)

All lower division core requirements must be completed prior to enrollment in upper division courses.

- ECON 3107 - Global Economic Analysis *Units: 4*
or *MGMT 4670 Multinational Business*
- ECON 3551 - Managerial Economics and Business Strategy *Units: 4*
- FIN 3300 - Financial Management *Units: 4*
- ITM 3060 - Information Technology Management *Units: 4*
- MGMT 3100 - Decision Science *Units: 4*
- MGMT 3560 - Business and Professional Ethics *Units: 4*
or *cross-listed: PHIL 3560*
- MGMT 3614 - Organizational Behavior *Units: 4*
- MGMT 3620 - Operations Management *Units: 4*
- MGMT 4500 - Business, Government, and Society *Units: 4*
or *ACCT 4911 Accounting Ethics*
- MGMT 4650 - Seminar in Strategic Business Management *Units: 4*
- MKTG 3401 - Marketing Principles *Units: 4*

Note:

- *Neither ECON 3107 nor MGMT 4670 can be used as an elective for any BSBA options.*
- *ACCT 4911 counts towards the requirement of 4 quarter units of accounting ethics on the Ethics Study for California CPA (Certified Public Accountant) licensure. Students who choose the Accounting option are strongly encouraged to take ACCT 4911.*

III. Option Requirements (24-28 units)

Select a Business Administration option listed in the Programs of Study chapter of this catalog. A student cannot have both an option and a minor in the same area.

Entrepreneurship Option (24 units)

This option concentrates on the management of existing small and medium size businesses, the procedures for establishing new ventures either as new firms or as subdivisions of existing firms, and the problems confronting new venture managers during the critical start-up period. The option provides an excellent preparation to those who plan to have their own firm, to be employed by small or medium size business firms with high growth potential, or to work in positions within financial institutions, government agencies, management consulting firms, and marketing agencies that deal primarily with the needs and problems of small to medium sized firms.

Required courses:

- ECON 3555 - Economics of Innovation and Intellectual Property *Units: 4*
- ENTR 4485 - Establishing New Enterprises *Units: 4*
- ENTR 4490 - Practicum in Small Business Management *Units: 4*
- FIN 4305 - Entrepreneurial Finance *Units: 4*
- MGMT 3110 - Project Management *Units: 4*
- MKTG 3445 - Marketing Research *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Business Administration, Finance Option, B.S.

Program Description

The Business Administration major program is structured around a set of core courses enabling students to develop general business perspective and skills. Students are required to choose an area of specialization (option) corresponding to their desired career path. Each option allows students flexibility to customize their program by choosing option elective courses. The program is designed to encourage students to actively participate in shaping their program to fit their individual needs.

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Student Learning Outcomes

Students graduating with a B.S. in Business Administration from Cal State East Bay will be able to:

1. Recognize and recall foundation knowledge relevant to business management.
2. Integrate and think critically across functional areas to solve business problems.
3. Understand and apply quantitative methods and tools in evaluating business problems.
4. Apply technology to analyze business problems.
5. Apply effective oral communication skills.
6. Apply effective written communication skills.
7. Apply effective team working skills.
8. Understand ethical issues and derive solutions for ethical problems.

Business Administration, B.S.

Major Requirements (B.S.)

Expiration of Courses

Upper division major/option requirement courses will expire ten years after completion of the quarter in which they are earned. Expired courses cannot be used to fulfill degree requirements and must be replaced by current credits. Requests for waivers of the ten-year limit for extenuating circumstances, other than mere failure to register, are made to the department chair in which the course resides and the director of undergraduate programs.

Transfer of courses

Upper division courses will only be considered for equivalency or transfer credit if they are from AACSB accredited institutions. Exceptions will be made for programs that have current and signed agreements with the College of Business and Economics.

The B.S. degree requires a total of 180 units. The Business Administration major consists of 97-105 units. The Business Administration major requires three sets of courses: (I) lower division core courses with a grade of "C" or better for each course, (II) upper division core courses, and (III) courses to fulfill option requirements. The numbers appearing in () following each course title refer to units; in most cases this is 4 since the typical course has 4 units.

I. Lower Division (29-33 units)

- ACCT 2251 - Introduction to Financial Accounting *Units: 4*
- ACCT 2253 - Introduction to Managerial Accounting *Units: 4*
- ACCT 2701 - Legal Environment of Business *Units: 4*
- ECON 2301 - Principles of Microeconomics *Units: 4*
- ECON 2302 - Principles of Macroeconomics *Units: 4*
- MATH 1810 - Mathematics for Business and Social Sciences *Units: 4*
- STAT 1000 - Elements of Probability and Statistics *Units: 5*
or STAT 2010 Elements of Statistics for Business and Economics
- ITM 1270 - Fundamentals of Information Systems and Applications *Units: 4 (must be completed with a grade of "C" or better).*
or
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 - Receive a total scaled score of 50 or higher on the "Information Systems and Computer Applications" test administered by College Board's College-Level Examination Program (CLEP). Note that the total scaled scores fall between 20 and 80. Your total scaled score must be at least 50, which does not mean 50%. Browse http://www.collegeboard.com/student/testing/clep/ex_isca.html for all details regarding the "Information Systems and Computer Applications" test.

Note:

Mathematics Course: Students who plan to pursue one of the more quantitative options or a graduate program are encouraged to enroll in MATH 1304 Calculus I, in place of MATH 1810.

II. Upper Division Core Requirements (44 units)

All lower division core requirements must be completed prior to enrollment in upper division courses.

- ECON 3107 - Global Economic Analysis *Units: 4*
or MGMT 4670 *Multinational Business*
- ECON 3551 - Managerial Economics and Business Strategy *Units: 4*
- FIN 3300 - Financial Management *Units: 4*

- ITM 3060 - Information Technology Management *Units: 4*
- MGMT 3100 - Decision Science *Units: 4*
- MGMT 3560 - Business and Professional Ethics *Units: 4*
or cross-listed: PHIL 3560
- MGMT 3614 - Organizational Behavior *Units: 4*
- MGMT 3620 - Operations Management *Units: 4*
- MGMT 4500 - Business, Government, and Society *Units: 4*
or ACCT 4911 Accounting Ethics
- MGMT 4650 - Seminar in Strategic Business Management *Units: 4*
- MKTG 3401 - Marketing Principles *Units: 4*

Note:

- *Neither ECON 3107 nor MGMT 4670 can be used as an elective for any BSBA options.*
- *ACCT 4911 counts towards the requirement of 4 quarter units of accounting ethics on the Ethics Study for California CPA (Certified Public Accountant) licensure. Students who choose the Accounting option are strongly encouraged to take ACCT 4911.*

III. Option Requirements (24-28 units)

Select a Business Administration option listed in the Programs of Study chapter of this catalog. A student cannot have both an option and a minor in the same area.

Finance Option (24 units)

The Finance option is designed to prepare students for careers in the financial management of corporations, commercial, retail and investment banking, asset management, and other areas in finance. The option develops decision-making skills by first providing a sound theoretical foundation of knowledge. Through hands-on coursework in areas such as financial analysis, investments, derivatives, international finance, risk management, financial modeling, and venture financing, students learn the critical thinking, problem solving, ethics, and effective communication skills valued most by employers.

Required courses:

- FIN 4300 - Corporate Finance *Units: 4*
- FIN 4310 - Investment Analysis *Units: 4*

Additional upper division courses:

Select four Finance courses from the following list (or any 4300 level Finance course not listed below):

- FIN 4305 - Entrepreneurial Finance *Units: 4*
- FIN 4315 - Derivatives Markets *Units: 4*
- FIN 4320 - Problems in Corporate Finance *Units: 4*
- FIN 4328 - Risk Management in Financial Institutions *Units: 4*
- FIN 4330 - Financial Modeling *Units: 4*
- FIN 4370 - Seminar in Financial Theory *Units: 4*
Students wishing to take FIN 4370 must fulfill the MATH 1305 prerequisite.
- FIN 4375 - International Business Finance *Units: 4*

Note:

Students interested in a career in financial management, financial analysis and corporate finance are recommended to choose from the following courses as electives:

- FIN 4305 Entrepreneurial Finance (4),
- FIN 4315 Derivatives Markets (4),
- FIN 4320 Problems in Corporate Finance (4),
- FIN 4328 Risk Management in Financial Institutions (4),
- FIN 4330 Financial Modeling (4),
- FIN 4375 International Business Finance (4).

Students interested in a career in investment banking, financial institutions, asset management and risk management, are recommended to choose from the following courses as electives:

- FIN 4305 Entrepreneurial Finance (4),
- FIN 4315 Derivatives Markets (4),
- FIN 4328 Risk Management in Financial Institutions (4),
- FIN 4330 Financial Modeling (4),
- FIN 4375 International Business Finance (4).

Students interested in preparing for the CFA level I exam are recommended to take the following courses as electives:

- FIN 4315 Derivatives Markets (4),
- FIN 4328 Risk Management in Financial Institutions (4).

Other Degree Requirements

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Business Administration, General Management Option, B.S.

Program Description

The Business Administration major program is structured around a set of core courses enabling students to develop general business perspective and skills. Students are required to choose an area of specialization (option) corresponding to their desired career path. Each option allows students flexibility to customize their program by choosing option elective courses. The program is designed to encourage students to actively participate in shaping their program to fit their individual needs.

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6. Apply effective written communication skills.

7. Apply effective team working skills.
8. Understand ethical issues and derive solutions for ethical problems.

Business Administration, B.S.

Major Requirements (B.S.)

Expiration of Courses

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I. Lower Division (29-33 units)

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- ACCT 2701 - Legal Environment of Business *Units: 4*
- ECON 2301 - Principles of Microeconomics *Units: 4*
- ECON 2302 - Principles of Macroeconomics *Units: 4*
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- STAT 1000 - Elements of Probability and Statistics *Units: 5*
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II. Upper Division Core Requirements (44 units)

All lower division core requirements must be completed prior to enrollment in upper division courses.

- ECON 3107 - Global Economic Analysis *Units: 4*

or MGMT 4670 Multinational Business

- ECON 3551 - Managerial Economics and Business Strategy *Units: 4*
- FIN 3300 - Financial Management *Units: 4*
- ITM 3060 - Information Technology Management *Units: 4*
- MGMT 3100 - Decision Science *Units: 4*
- MGMT 3560 - Business and Professional Ethics *Units: 4*
or cross-listed: PHIL 3560
- MGMT 3614 - Organizational Behavior *Units: 4*
- MGMT 3620 - Operations Management *Units: 4*
- MGMT 4500 - Business, Government, and Society *Units: 4*
or ACCT 4911 Accounting Ethics
- MGMT 4650 - Seminar in Strategic Business Management *Units: 4*
- MKTG 3401 - Marketing Principles *Units: 4*

Note:

- *Neither ECON 3107 nor MGMT 4670 can be used as an elective for any BSBA options.*
- *ACCT 4911 counts towards the requirement of 4 quarter units of accounting ethics on the Ethics Study for California CPA (Certified Public Accountant) licensure. Students who choose the Accounting option are strongly encouraged to take ACCT 4911.*

III. Option Requirements (24-28 units)

Select a Business Administration option listed in the Programs of Study chapter of this catalog. A student cannot have both an option and a minor in the same area.

General Management Option (24 units)

The General Management option allows breadth of study in business fields. Students can choose 24 units of upper division elective courses offered by the College of Business and Economics (excluding ECON 3000, ECON 3107, MGMT 4670, MKTG 3495) that meet their needs, interests, and career goals.

Requirements

Courses must be drawn from at least three different subject areas (based on course prefixes), but no more than 12 units may be taken from any one subject area.

Note:

No more than 4 units used to fulfill other requirements (e.g., for general education, minors, or other BSBA options) can be counted toward the General Management option.

Subject Areas

Accounting (ACCT)

Economics (ECON)

Entrepreneurship (ENTR)

Finance (FIN)

Information Technology Management (ITM)

Management (MGMT)

Marketing (MKTG)

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Business Administration, Human Resources Management Option, B.S.

Program Description

The Business Administration major program is structured around a set of core courses enabling students to develop general business perspective and skills. Students are required to choose an area of specialization (option) corresponding to their desired career path. Each option allows students flexibility to customize their program by choosing option elective courses. The program is designed to encourage students to actively participate in shaping their program to fit their individual needs.

The undergraduate and the graduate programs in Business Administration are accredited by the Association to Advance Collegiate Schools of Business International (AACSB).

Undergraduate Student Success & Service Center

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Student Learning Outcomes

Students graduating with a B.S. in Business Administration from Cal State East Bay will be able to:

1. Recognize and recall foundation knowledge relevant to business management.
2. Integrate and think critically across functional areas to solve business problems.
3. Understand and apply quantitative methods and tools in evaluating business problems.
4. Apply technology to analyze business problems.
5. Apply effective oral communication skills.
6. Apply effective written communication skills.
7. Apply effective team working skills.
8. Understand ethical issues and derive solutions for ethical problems.

Business Administration, B.S.

Major Requirements (B.S.)

Expiration of Courses

Upper division major/option requirement courses will expire ten years after completion of the quarter in which they are earned. Expired courses cannot be used to fulfill degree requirements and must be replaced by current credits. Requests for waivers of the ten-year limit for extenuating circumstances, other than mere failure to register, are made to the department chair in which the course resides and the director of undergraduate programs.

Transfer of courses

Upper division courses will only be considered for equivalency or transfer credit if they are from AACSB accredited institutions. Exceptions will be made for programs that have current and signed agreements with the College of Business and Economics.

The B.S. degree requires a total of 180 units. The Business Administration major consists of 97-105 units. The Business Administration major requires three sets of courses: (I) lower division core courses with a grade of "C" or better for each course, (II) upper division core courses, and (III) courses to fulfill option requirements. The numbers appearing in () following each course title refer to units; in most cases this is 4 since the typical course has 4 units.

I. Lower Division (29-33 units)

- ACCT 2251 - Introduction to Financial Accounting *Units: 4*
- ACCT 2253 - Introduction to Managerial Accounting *Units: 4*
- ACCT 2701 - Legal Environment of Business *Units: 4*
- ECON 2301 - Principles of Microeconomics *Units: 4*
- ECON 2302 - Principles of Macroeconomics *Units: 4*
- MATH 1810 - Mathematics for Business and Social Sciences *Units: 4*
- STAT 1000 - Elements of Probability and Statistics *Units: 5*
or STAT 2010 Elements of Statistics for Business and Economics
- ITM 1270 - Fundamentals of Information Systems and Applications *Units: 4 (must be completed with a grade of "C" or better).*
or
Digital proficiency can be fulfilled in one of the following ways:
 - Pass the Digital Proficiency test administered quarterly by the Department of Management, College of Business and Economics. Contact CBE Undergraduate Student Success & Service Center for details regarding the test.
 - Receive a total scaled score of 50 or higher on the "Information Systems and Computer Applications" test administered by College Board's College-Level Examination Program (CLEP). Note that the total scaled scores fall between 20 and 80. Your total scaled score must be at least 50, which does not mean 50%. Browse http://www.collegeboard.com/student/testing/clep/ex_isca.html for all details regarding the "Information Systems and Computer Applications" test.

Note:

Mathematics Course: Students who plan to pursue one of the more quantitative options or a graduate program are encouraged to enroll in MATH 1304 Calculus I, in place of MATH 1810.

II. Upper Division Core Requirements (44 units)

All lower division core requirements must be completed prior to enrollment in upper division courses.

- ECON 3107 - Global Economic Analysis *Units: 4*
or MGMT 4670 Multinational Business
- ECON 3551 - Managerial Economics and Business Strategy *Units: 4*
- FIN 3300 - Financial Management *Units: 4*
- ITM 3060 - Information Technology Management *Units: 4*
- MGMT 3100 - Decision Science *Units: 4*
- MGMT 3560 - Business and Professional Ethics *Units: 4*
or cross-listed: PHIL 3560
- MGMT 3614 - Organizational Behavior *Units: 4*
- MGMT 3620 - Operations Management *Units: 4*
- MGMT 4500 - Business, Government, and Society *Units: 4*
or ACCT 4911 Accounting Ethics
- MGMT 4650 - Seminar in Strategic Business Management *Units: 4*
- MKTG 3401 - Marketing Principles *Units: 4*

Note:

- *Neither ECON 3107 nor MGMT 4670 can be used as an elective for any BSBA options.*

- *ACCT 4911 counts towards the requirement of 4 quarter units of accounting ethics on the Ethics Study for California CPA (Certified Public Accountant) licensure. Students who choose the Accounting option are strongly encouraged to take ACCT 4911.*

III. Option Requirements (24-28 units)

Select a Business Administration option listed in the Programs of Study chapter of this catalog. A student cannot have both an option and a minor in the same area.

Human Resources Management Option (24 units)

The Human Resources Management option concentrates on the management of people in the workplace. It prepares students for careers in human resources management and labor relations in business, government, and labor organizations. Those with a strong interest in human behavior will find this to be an appropriate area of study. Coursework is concerned with management of human resources, including selection, training, evaluation, and compensation of employees.

Required courses:

- MGMT 3610 - Strategic Human Resources Management *Units: 4*

choice of five from:

- MGMT 3612 - Seminar in Human Resources Management *Units: 4*
- MGMT 3616 - Human Resources Assessment and Measurement *Units: 4*
- MGMT 3680 - Employee Relations and Employment Law *Units: 4*
- MGMT 4520 - Negotiation and Conflict Resolution *Units: 4*
- MGMT 4615 - Compensation and Reward Systems *Units: 4*
- MGMT 4618 - Human Resources Training and Development *Units: 4*
- MGMT 4675 - International Human Resources Management *Units: 4*

Recommended course:

- MGMT 3600 - Theories of Management *Units: 4*

Note:

Students considering this option are strongly advised to take PSYC 1000, which may also satisfy lower division GE requirements.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Business Administration, Information Technology Management (ITM) Option, B.S.

Program Description

The Business Administration major program is structured around a set of core courses enabling students to develop general business perspective and skills. Students are required to choose an area of specialization (option) corresponding to their desired career path. Each option allows students

flexibility to customize their program by choosing option elective courses. The program is designed to encourage students to actively participate in shaping their program to fit their individual needs.

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Student Learning Outcomes

Students graduating with a B.S. in Business Administration from Cal State East Bay will be able to:

1. Recognize and recall foundation knowledge relevant to business management.
2. Integrate and think critically across functional areas to solve business problems.
3. Understand and apply quantitative methods and tools in evaluating business problems.
4. Apply technology to analyze business problems.
5. Apply effective oral communication skills.
6. Apply effective written communication skills.
7. Apply effective team working skills.
8. Understand ethical issues and derive solutions for ethical problems.

Business Administration, B.S.

Major Requirements (B.S.)

Expiration of Courses

Upper division major/option requirement courses will expire ten years after completion of the quarter in which they are earned. Expired courses cannot be used to fulfill degree requirements and must be replaced by current credits. Requests for waivers of the ten-year limit for extenuating circumstances, other than mere failure to register, are made to the department chair in which the course resides and the director of undergraduate programs.

Transfer of courses

Upper division courses will only be considered for equivalency or transfer credit if they are from AACSB accredited institutions. Exceptions will be made for programs that have current and signed agreements with the College of Business and Economics.

The B.S. degree requires a total of 180 units. The Business Administration major consists of 97-105 units. The Business Administration major requires three sets of courses: (I) lower division core courses with a grade of "C" or better for each course, (II) upper division core courses, and (III) courses to fulfill option requirements. The numbers appearing in () following each course title refer to units; in most cases this is 4 since the typical course has 4 units.

I. Lower Division (29-33 units)

- ACCT 2251 - Introduction to Financial Accounting *Units: 4*
- ACCT 2253 - Introduction to Managerial Accounting *Units: 4*
- ACCT 2701 - Legal Environment of Business *Units: 4*
- ECON 2301 - Principles of Microeconomics *Units: 4*
- ECON 2302 - Principles of Macroeconomics *Units: 4*
- MATH 1810 - Mathematics for Business and Social Sciences *Units: 4*
- STAT 1000 - Elements of Probability and Statistics *Units: 5*

or STAT 2010 Elements of Statistics for Business and Economics

- ITM 1270 - Fundamentals of Information Systems and Applications *Units: 4 (must be completed with a grade of "C" or better).*

or

Digital proficiency can be fulfilled in one of the following ways:

- Pass the Digital Proficiency test administered quarterly by the Department of Management, College of Business and Economics. Contact CBE Undergraduate Student Success & Service Center for details regarding the test.
- Receive a total scaled score of 50 or higher on the "Information Systems and Computer Applications" test administered by College Board's College-Level Examination Program (CLEP). Note that the total scaled scores fall between 20 and 80. Your total scaled score must be at least 50, which does not mean 50%. Browse http://www.collegeboard.com/student/testing/clep/ex_isca.html for all details regarding the "Information Systems and Computer Applications" test.

Note:

Mathematics Course: Students who plan to pursue one of the more quantitative options or a graduate program are encouraged to enroll in MATH 1304 Calculus I, in place of MATH 1810.

II. Upper Division Core Requirements (44 units)

All lower division core requirements must be completed prior to enrollment in upper division courses.

- ECON 3107 - Global Economic Analysis *Units: 4*
or *MGMT 4670 Multinational Business*
- ECON 3551 - Managerial Economics and Business Strategy *Units: 4*
- FIN 3300 - Financial Management *Units: 4*
- ITM 3060 - Information Technology Management *Units: 4*
- MGMT 3100 - Decision Science *Units: 4*
- MGMT 3560 - Business and Professional Ethics *Units: 4*
or *cross-listed: PHIL 3560*
- MGMT 3614 - Organizational Behavior *Units: 4*
- MGMT 3620 - Operations Management *Units: 4*
- MGMT 4500 - Business, Government, and Society *Units: 4*
or *ACCT 4911 Accounting Ethics*
- MGMT 4650 - Seminar in Strategic Business Management *Units: 4*
- MKTG 3401 - Marketing Principles *Units: 4*

Note:

- *Neither ECON 3107 nor MGMT 4670 can be used as an elective for any BSBA options.*
- *ACCT 4911 counts towards the requirement of 4 quarter units of accounting ethics on the Ethics Study for California CPA (Certified Public Accountant) licensure. Students who choose the Accounting option are strongly encouraged to take ACCT 4911.*

III. Option Requirements (24-28 units)

Select a Business Administration option listed in the Programs of Study chapter of this catalog. A student cannot have both an option and a minor in the same area.

Information Technology Management (ITM) Option (24 units)

This option prepares the graduate for management positions in the IT (information technology) industry. With the emergence of technology such as the internet, ERP systems and wireless communication, IT applications are now a fundamental and organic component of every business discipline. This option gives you a comprehensive overview of these applications in different functional areas of an organization such as accounting/finance, marketing, manufacturing, distribution and human resource management. As a graduate of this option you would have a solid understanding of IT applications in different areas of business, how they embed within their respective business processes and add value to them.

Required courses:

- ITM 4271 - Database Management and Applications *Units: 4*
- ITM 4272 - Information Technology and Telecommunication Systems *Units: 4*
- ITM 4273 - Business Intelligence Systems *Units: 4*
- ITM 4277 - Information Systems Development and Management *Units: 4*
- ITM 4278 - E-Business Systems Development *Units: 4*
- MGMT 3110 - Project Management *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Business Administration, Marketing Management Option, B.S.

Program Description

The Business Administration major program is structured around a set of core courses enabling students to develop general business perspective and skills. Students are required to choose an area of specialization (option) corresponding to their desired career path. Each option allows students flexibility to customize their program by choosing option elective courses. The program is designed to encourage students to actively participate in shaping their program to fit their individual needs.

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Student Learning Outcomes

Students graduating with a B.S. in Business Administration from Cal State East Bay will be able to:

1. Recognize and recall foundation knowledge relevant to business management.
2. Integrate and think critically across functional areas to solve business problems.
3. Understand and apply quantitative methods and tools in evaluating business problems.
4. Apply technology to analyze business problems.
5. Apply effective oral communication skills.
6. Apply effective written communication skills.
7. Apply effective team working skills.
8. Understand ethical issues and derive solutions for ethical problems.

Business Administration, B.S.

Major Requirements (B.S.)

Expiration of Courses

Upper division major/option requirement courses will expire ten years after completion of the quarter in which they are earned. Expired courses cannot be used to fulfill degree requirements and must be replaced by current credits. Requests for waivers of the ten-year limit for extenuating circumstances, other than mere failure to register, are made to the department chair in which the course resides and the director of undergraduate programs.

Transfer of courses

Upper division courses will only be considered for equivalency or transfer credit if they are from AACSB accredited institutions. Exceptions will be made for programs that have current and signed agreements with the College of Business and Economics.

The B.S. degree requires a total of 180 units. The Business Administration major consists of 97-105 units. The Business Administration major requires three sets of courses: (I) lower division core courses with a grade of "C" or better for each course, (II) upper division core courses, and (III) courses to fulfill option requirements. The numbers appearing in () following each course title refer to units; in most cases this is 4 since the typical course has 4 units.

I. Lower Division (29-33 units)

- ACCT 2251 - Introduction to Financial Accounting *Units: 4*
- ACCT 2253 - Introduction to Managerial Accounting *Units: 4*
- ACCT 2701 - Legal Environment of Business *Units: 4*
- ECON 2301 - Principles of Microeconomics *Units: 4*
- ECON 2302 - Principles of Macroeconomics *Units: 4*
- MATH 1810 - Mathematics for Business and Social Sciences *Units: 4*
- STAT 1000 - Elements of Probability and Statistics *Units: 5*
or STAT 2010 Elements of Statistics for Business and Economics
- ITM 1270 - Fundamentals of Information Systems and Applications *Units: 4 (must be completed with a grade of "C" or better).*
or

Digital proficiency can be fulfilled in one of the following ways:

- Pass the Digital Proficiency test administered quarterly by the Department of Management, College of Business and Economics. Contact CBE Undergraduate Student Success & Service Center for details regarding the test.
- Receive a total scaled score of 50 or higher on the "Information Systems and Computer Applications" test administered by College Board's College-Level Examination Program (CLEP). Note that the total scaled scores fall between 20 and 80. Your total scaled score must be at least 50, which does not mean 50%. Browse http://www.collegeboard.com/student/testing/clep/ex_isca.html for all details regarding the "Information Systems and Computer Applications" test.

Note:

Mathematics Course: Students who plan to pursue one of the more quantitative options or a graduate program are encouraged to enroll in MATH 1304 Calculus I, in place of MATH 1810.

II. Upper Division Core Requirements (44 units)

All lower division core requirements must be completed prior to enrollment in upper division courses.

- ECON 3107 - Global Economic Analysis *Units: 4*
or MGMT 4670 *Multinational Business*
- ECON 3551 - Managerial Economics and Business Strategy *Units: 4*
- FIN 3300 - Financial Management *Units: 4*
- ITM 3060 - Information Technology Management *Units: 4*
- MGMT 3100 - Decision Science *Units: 4*
- MGMT 3560 - Business and Professional Ethics *Units: 4*
or cross-listed: PHIL 3560
- MGMT 3614 - Organizational Behavior *Units: 4*
- MGMT 3620 - Operations Management *Units: 4*
- MGMT 4500 - Business, Government, and Society *Units: 4*

or ACCT 4911 Accounting Ethics

- MGMT 4650 - Seminar in Strategic Business Management *Units: 4*
- MKTG 3401 - Marketing Principles *Units: 4*

Note:

- Neither ECON 3107 nor MGMT 4670 can be used as an elective for any BSBA options.
- ACCT 4911 counts towards the requirement of 4 quarter units of accounting ethics on the Ethics Study for California CPA (Certified Public Accountant) licensure. Students who choose the Accounting option are strongly encouraged to take ACCT 4911.

III. Option Requirements (24-28 units)

Select a Business Administration option listed in the Programs of Study chapter of this catalog. A student cannot have both an option and a minor in the same area.

Marketing Management Option (24 units)

The task of marketing is to help an organization create and maintain satisfying relationships with its important customers. Students completing the Marketing Management option acquire the knowledge and skills necessary to understand the needs of customers and the market, to design effective marketing strategies, and to successfully implement and monitor the chosen marketing program. Global competition coupled with technological advances forces both for-profit and nonprofit organizations to revitalize the marketing function for their success. The growing awareness of the importance of marketing has led to an increase in the number of marketing positions available. The option prepares students for careers in advertising and promotion, brand and product management, sales and sales management, retailing, non-profit, international marketing, marketing research, new product planning, marketing logistics and public relations.

Required courses:

- MKTG 3445 - Marketing Research *Units: 4*
- MKTG 4400 - Integrated Marketing Management *Units: 4*
- MKTG 4417 - Consumer Behavior *Units: 4*

Select three marketing courses from the following list:

- MKTG 3410 - Advertising Management *Units: 4*
- MKTG 3415 - Personal Selling *Units: 4*
- MKTG 3425 - Promotion *Units: 4*
- MKTG 3440 - Products and Pricing *Units: 4*
- MKTG 4417 - Consumer Behavior *Units: 4*
- MKTG 4435 - Services Marketing *Units: 4*
- MKTG 4450 - Marketing Seminar *Units: 4*
- MKTG 4470 - International Marketing *Units: 4*

Strongly recommended:

- PSYC 1000 - General Psychology *Units: 5*
or one of
- PSYC 1001 - General Psychology and Society *Units: 5*
or
- PSYC 1005 - General Psychology for Healthier Living *Units: 5*

Note:

PSYC courses may also satisfy lower division G.E. requirements. .

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Business Administration, Operations Supply Chain Management (OSCM) Option, B.S.

Program Description

The Business Administration major program is structured around a set of core courses enabling students to develop general business perspective and skills. Students are required to choose an area of specialization (option) corresponding to their desired career path. Each option allows students flexibility to customize their program by choosing option elective courses. The program is designed to encourage students to actively participate in shaping their program to fit their individual needs.

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Student Learning Outcomes

Students graduating with a B.S. in Business Administration from Cal State East Bay will be able to:

1. Recognize and recall foundation knowledge relevant to business management.
2. Integrate and think critically across functional areas to solve business problems.
3. Understand and apply quantitative methods and tools in evaluating business problems.
4. Apply technology to analyze business problems.
5. Apply effective oral communication skills.
6. Apply effective written communication skills.
7. Apply effective team working skills.
8. Understand ethical issues and derive solutions for ethical problems.

Business Administration, B.S.

Major Requirements (B.S.)

Expiration of Courses

Upper division major/option requirement courses will expire ten years after completion of the quarter in which they are earned. Expired courses cannot be used to fulfill degree requirements and must be replaced by current credits. Requests for waivers of the ten-year limit for extenuating circumstances, other than mere failure to register, are made to the department chair in which the course resides and the director of undergraduate programs.

Transfer of courses

Upper division courses will only be considered for equivalency or transfer credit if they are from AACSB accredited institutions. Exceptions will be made for programs that have current and signed agreements with the College of Business and Economics.

The B.S. degree requires a total of 180 units. The Business Administration major consists of 97-105 units. The Business Administration major requires three sets of courses: (I) lower division core courses with a grade of "C" or better for each course, (II) upper division core courses, and (III) courses to fulfill option requirements. The numbers appearing in () following each course title refer to units; in most cases this is 4 since the typical course has 4 units.

I. Lower Division (29-33 units)

- ACCT 2251 - Introduction to Financial Accounting *Units: 4*
- ACCT 2253 - Introduction to Managerial Accounting *Units: 4*
- ACCT 2701 - Legal Environment of Business *Units: 4*
- ECON 2301 - Principles of Microeconomics *Units: 4*
- ECON 2302 - Principles of Macroeconomics *Units: 4*
- MATH 1810 - Mathematics for Business and Social Sciences *Units: 4*
- STAT 1000 - Elements of Probability and Statistics *Units: 5*
or STAT 2010 Elements of Statistics for Business and Economics
- ITM 1270 - Fundamentals of Information Systems and Applications *Units: 4 (must be completed with a grade of "C" or better).*
or
Digital proficiency can be fulfilled in one of the following ways:
 - Pass the Digital Proficiency test administered quarterly by the Department of Management, College of Business and Economics. Contact CBE Undergraduate Student Success & Service Center for details regarding the test.
 - Receive a total scaled score of 50 or higher on the "Information Systems and Computer Applications" test administered by College Board's College-Level Examination Program (CLEP). Note that the total scaled scores fall between 20 and 80. Your total scaled score must be at least 50, which does not mean 50%. Browse http://www.collegeboard.com/student/testing/clep/ex_isca.html for all details regarding the "Information Systems and Computer Applications" test.

Note:

Mathematics Course: Students who plan to pursue one of the more quantitative options or a graduate program are encouraged to enroll in MATH 1304 Calculus I, in place of MATH 1810.

II. Upper Division Core Requirements (44 units)

All lower division core requirements must be completed prior to enrollment in upper division courses.

- ECON 3107 - Global Economic Analysis *Units: 4*
or MGMT 4670 Multinational Business
- ECON 3551 - Managerial Economics and Business Strategy *Units: 4*
- FIN 3300 - Financial Management *Units: 4*
- ITM 3060 - Information Technology Management *Units: 4*
- MGMT 3100 - Decision Science *Units: 4*
- MGMT 3560 - Business and Professional Ethics *Units: 4*
or cross-listed: PHIL 3560
- MGMT 3614 - Organizational Behavior *Units: 4*
- MGMT 3620 - Operations Management *Units: 4*
- MGMT 4500 - Business, Government, and Society *Units: 4*
or ACCT 4911 Accounting Ethics
- MGMT 4650 - Seminar in Strategic Business Management *Units: 4*
- MKTG 3401 - Marketing Principles *Units: 4*

Note:

- *Neither ECON 3107 nor MGMT 4670 can be used as an elective for any BSBA options.*

- *ACCT 4911 counts towards the requirement of 4 quarter units of accounting ethics on the Ethics Study for California CPA (Certified Public Accountant) licensure. Students who choose the Accounting option are strongly encouraged to take ACCT 4911.*

III. Option Requirements (24-28 units)

Select a Business Administration option listed in the Programs of Study chapter of this catalog. A student cannot have both an option and a minor in the same area.

Operations and Supply Chain Management Option (24 units)

This option is designed to prepare students to manage all the aspects of a firm's operations and supply chain functions in order to increase its efficiency and effectiveness, improve quality and eliminate waste of resources. This option covers purchasing and management of the material resources in the supply chain process and distribution network, production and operations management within the firm, project management, service operations, and quality management.

Required courses (8 units):

- MGMT 3645 - Global Supply Chain Management *Units: 4*
- MGMT 4640 - Enterprise Resource Management *Units: 4*

Select four courses (16 units) from the following electives list:

- MGMT 3110 - Project Management *Units: 4*
- MGMT 3115 - Supply Chain Data Analytics *Units: 4*
- MGMT 3624 - Supply Management and E-Procurement *Units: 4*
- MGMT 3626 - Management for Quality Improvement *Units: 4*
- MGMT 4625 - Service Operations Management *Units: 4*
- MGMT 4660 - Seminar in Operations and Supply Chain Management *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Chemistry, B.A.

Program Description

The Department of Chemistry and Biochemistry provides a strong education in chemistry and biochemistry that prepares its students to function and thrive in our society. The department attempts to increase the problem solving and critical thinking skills of all students. Non-science students learn about the scientific and chemical aspects of everyday life that allow them to understand issues related to the environment, energy production, disease prevention, and nutrition. Students of the sciences learn the fundamentals of chemistry that control the interactions of elements and molecules which form the building blocks in nature. Chemistry majors receive extensive instruction in predicting chemical reactivity. Building on an understanding of mathematics, physics, and biology, chemistry majors receive a background in the major disciplines of chemistry including inorganic, analytical, organic, physical, and biochemistry. Students learn the protocols and techniques for working safely with chemicals. The department recognizes the importance of the pursuit of new knowledge in the development of skilled scientists and productive members of society, and encourages its students to participate in research projects and cooperative educational opportunities.

The undergraduate programs offered by the department include: Chemistry, B.S.; Biochemistry, B.S.; Chemistry, Forensic Science Option, B.S.; Chemistry, B.A.; Chemistry, Chemistry Education Option, B.A.; Biochemistry, B.A.; Biochemistry, Chemistry Education Option, B.A.; and a

Chemistry Minor. Descriptions of these programs and their requirements are listed below. (See the Department of Chemistry and Biochemistry (Graduate) for descriptions of the department's Chemistry, M.S. and M.S. Option in Biochemistry.)

The Chemistry, B.S. degree is approved by the American Chemical Society (ACS). A certified degree is a valuable credential that serves as national-level recognition for completing a rigorous academic chemistry curriculum in an ACS-approved department. The extra rigor of an ACS certified degree is valued by both potential employers and graduate schools.

Mission Statement

It is imperative that CSUEB chemistry students possess sufficient theoretical and practical training in chemistry and biochemistry so that they will be able to assume the significant technical responsibilities required by the chemical and biotechnology industries that will employ them. It is important that our students are not only trained in chemistry (and biochemistry), but will become respected scientists and research technicians. In addition, it is important that students planning for entrance into Ph.D. programs or pre-professional programs are more than adequately prepared for entrance into these programs.

Student Learning Outcomes

Students graduating with a Bachelor's degree in Chemistry or Biochemistry from Cal State East Bay will be able to:

1. Demonstrate knowledge in the various areas of chemistry, including inorganic chemistry, analytical chemistry, organic chemistry, physical chemistry, and biochemistry.
2. Work effectively and safely in a laboratory environment to perform experimental procedures and operate modern chemical/biochemical instruments.
3. Use quantitative reasoning to analyze chemical problems and evaluate chemical data.
4. Write and speak clearly on chemical or biochemical issues.
5. Work collaboratively in teams to solve chemical problems.

Career Opportunities

Analytical Chemist
Biotechnologist
Biochemist
Biophysicist
Chemical Engineer
Chemist
Dietitian
Environmental Chemist
Food and Drug Inspector
Forensic Chemist
Geochemist
Geophysicist
Health Professional
Materials Scientist
Organic Chemist
Perfumer
Petrologist
Pharmacist
Pharmaceutical Chemist
Physical Chemist
Pollution Control
Professor
Public Health Educator
Quality Control Technician
Teacher
Water Purification Chemist

Features

The Department of Chemistry and Biochemistry employs highly qualified and experienced technical staff to assist faculty and students in their course and research experiences.

The Department of Chemistry and Biochemistry maintains laboratory equipment and instruments typical of comparable institutions. These include a 500 MHz nuclear magnetic resonance (NMR) spectrometer; UV-Visible (diode array), infrared and atomic absorption (AA: flame, graphite furnace and cold vapor) spectrophotometers; high performance liquid chromatograph (HPLC) and ion chromatograph (IC); an FTIR spectrometer; and capillary gas chromatograph/mass spectrometer (GC/MS). Other specialized equipment includes a research-grade dry box, growth chamber, anaerobic chamber, and environmental field sampling equipment. There are PC-controlled and various desktop versions of the HPLC and visible spectrometers. A molecular modeling facility is also available for instruction and research.

The university offers Cooperative Education coursework which provides chemically related employment opportunities and students may, with department approval, obtain credit for this work.

The Alchemist Club, a student affiliate of the American Chemical Society, is available to students majoring in Chemistry. They are active in many aspects of the department and provide free peer tutoring, participate in fund-raising for special projects, and take interesting field trips to local industries.

Preparation and Prerequisites

For Advanced Placement course equivalencies, see Registration. Prerequisite courses for all chemistry courses must be passed with a grade of "C-" or better. Requests for Grade Forgiveness will be allowed only on a space-available basis.

Major Requirements (B.A.)

The Bachelor Arts degree, major in Chemistry, is intended for students who would like to use their knowledge of chemistry as a starting point for a career in medicine, molecular biology, dentistry, teaching, environmental remediation, law, or business. Graduate degrees in these fields follow naturally from the undergraduate training required of the chemistry student. The major consists of 83-84 units; the B.A. degree requires a total of 180 units.

Sample Program

A Sample Program for this degree can be found at the department website: <http://www20.csueastbay.edu/csci/departments/chemistry/index.html>.

I. Lower Division (44 units)

- CHEM 1101 - General Chemistry *Units: 5*
- CHEM 1102 - General Chemistry *Units: 5*
- CHEM 1103 - General Chemistry *Units: 5*
- CHEM 2200 - Quantitative Analysis *Units: 5*
- MATH 1304 - Calculus I *Units: 4*
- MATH 1305 - Calculus II *Units: 4*
- PHYS 2701 - Introductory Physics: Force, Mass and Motion *Units: 4*
- PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*
- PHYS 2703 - Introductory Physics: Light and Modern Physics *Units: 4*

One of the following:

- CS 1020 - Introduction to Computers *Units: 4*
- CS 1080 - Introduction to Media Computation *Units: 4*
- CS 1160 - Introduction to Computer Science I *Units: 4*

II. Upper Division (28-29 units)

- CHEM 3200 - Bioanalytical and Forensic Instrumentation *Units: 4*

- CHEM 3301 - Organic Chemistry *Units: 5*
- CHEM 3302 - Organic Chemistry *Units: 5*
- CHEM 3303 - Organic Chemistry *Units: 5*
- CHEM 3400 - Introductory Biochemistry *Units: 4*

- CHEM 3501 - Biophysical Chemistry *Units: 4*
or
- CHEM 3511 - Physical Chemistry Lecture *Units: 3*

- CHEM 4700 - Survey of Chemical Literature *Units: 2*

III. Electives (11 units)

Chosen from the following list of upper division chemistry courses:

- CHEM 4161 - Advanced Inorganic Chemistry *Units: 3*
- CHEM 4162 - Advanced Inorganic Chemistry *Units: 3*
- CHEM 4180 - Inorganic Chemistry Laboratory *Units: 2*
- CHEM 4240 - Instrumental Methods of Analysis *Units: 4*
- CHEM 4311 - Advanced Organic Chemistry *Units: 4*
- CHEM 4601 - Environmental Chemistry I *Units: 4*
- CHEM 4602 - Environmental Chemistry II *Units: 4*
- CHEM 4810 - Undergraduate Research *Units: 2*
- CHEM 4900 - Independent Study *Units: 1-4*

Note:

No more than two units of CHEM 4810 or CHEM 4900 or combined can be applied to the upper division chemistry electives.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Chemistry, B.S.

Program Description

The Department of Chemistry and Biochemistry provides a strong education in chemistry and biochemistry that prepares its students to function and thrive in our society. The department attempts to increase the problem solving and critical thinking skills of all students. Non-science students learn about the scientific and chemical aspects of everyday life that allow them to understand issues related to the environment, energy production, disease prevention, and nutrition. Students of the sciences learn the fundamentals of chemistry that control the interactions of elements and molecules which form the building blocks in nature. Chemistry majors receive extensive instruction in predicting chemical reactivity. Building on an understanding of mathematics, physics, and biology, chemistry majors receive a background in the major disciplines of chemistry including inorganic, analytical, organic, physical, and biochemistry. Students learn the protocols and techniques for working safely with chemicals. The department recognizes the importance of the pursuit of new knowledge in the development of skilled scientists and productive members of society, and encourages its students to participate in research projects and cooperative educational opportunities.

The undergraduate programs offered by the department include: Chemistry, B.S.; Biochemistry, B.S.; Chemistry, Forensic Science Option, B.S.; Chemistry, B.A.; Chemistry, Chemistry Education Option, B.A.; Biochemistry, B.A.; Biochemistry, Chemistry Education Option, B.A.; and a

Chemistry Minor. Descriptions of these programs and their requirements are listed below. (See the Department of Chemistry and Biochemistry (Graduate) for descriptions of the department's Chemistry, M.S. and M.S. Option in Biochemistry.)

The Chemistry, B.S. degree is approved by the American Chemical Society (ACS). A certified degree is a valuable credential that serves as national-level recognition for completing a rigorous academic chemistry curriculum in an ACS-approved department. The extra rigor of an ACS certified degree is valued by both potential employers and graduate schools.

Mission Statement

It is imperative that CSUEB chemistry students possess sufficient theoretical and practical training in chemistry and biochemistry so that they will be able to assume the significant technical responsibilities required by the chemical and biotechnology industries that will employ them. It is important that our students are not only trained in chemistry (and biochemistry), but will become respected scientists and research technicians. In addition, it is important that students planning for entrance into Ph.D. programs or pre-professional programs are more than adequately prepared for entrance into these programs.

Student Learning Outcomes

Students graduating with a Bachelor's degree in Chemistry or Biochemistry from Cal State East Bay will be able to:

1. Demonstrate knowledge in the various areas of chemistry, including inorganic chemistry, analytical chemistry, organic chemistry, physical chemistry, and biochemistry.
2. Work effectively and safely in a laboratory environment to perform experimental procedures and operate modern chemical/biochemical instruments.
3. Use quantitative reasoning to analyze chemical problems and evaluate chemical data.
4. Write and speak clearly on chemical or biochemical issues.
5. Work collaboratively in teams to solve chemical problems.

Career Opportunities

Analytical Chemist
Biotechnologist
Biochemist
Biophysicist
Chemical Engineer
Chemist
Dietitian
Environmental Chemist
Food and Drug Inspector
Forensic Chemist
Geochemist
Geophysicist
Health Professional
Materials Scientist
Organic Chemist
Perfumer
Petrologist
Pharmacist
Pharmaceutical Chemist
Physical Chemist
Pollution Control
Professor
Public Health Educator
Quality Control Technician
Teacher
Water Purification Chemist

Features

The Department of Chemistry and Biochemistry employs highly qualified and experienced technical staff to assist faculty and students in their course and research experiences.

The Department of Chemistry and Biochemistry maintains laboratory equipment and instruments typical of comparable institutions. These include a 500 MHz nuclear magnetic resonance (NMR) spectrometer; UV-Visible (diode array), infrared and atomic absorption (AA: flame, graphite furnace and cold vapor) spectrophotometers; high performance liquid chromatograph (HPLC) and ion chromatograph (IC); an FTIR spectrometer; and capillary gas chromatograph/mass spectrometer (GC/MS). Other specialized equipment includes a research-grade dry box, growth chamber, anaerobic chamber, and environmental field sampling equipment. There are PC-controlled and various desktop versions of the HPLC and visible spectrometers. A molecular modeling facility is also available for instruction and research.

The university offers Cooperative Education coursework which provides chemically related employment opportunities and students may, with department approval, obtain credit for this work.

The Alchemist Club, a student affiliate of the American Chemical Society, is available to students majoring in Chemistry. They are active in many aspects of the department and provide free peer tutoring, participate in fund-raising for special projects, and take interesting field trips to local industries.

Preparation and Prerequisites

For Advanced Placement course equivalencies, see Registration. Prerequisite courses for all chemistry courses must be passed with a grade of "C-" or better. Requests for Grade Forgiveness will be allowed only on a space-available basis.

Sample Program

A Sample Program for this degree can be found at the department website:
<http://www20.csueastbay.edu/csci/departments/chemistry/index.html>.

B.S. Chemistry

The Bachelor of Science degree, major in Chemistry, is designed to prepare students for graduate school in Chemistry and related fields and for industrial employment which involves research or a high degree of technical proficiency. It is intended for students desiring the highest degree of specialization. Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 108-109 units; the B.S. degree requires a total of 180 units.

Major Requirements (B.S.)

I. Lower Division (55 units)

- CHEM 1101 - General Chemistry *Units: 5*
- CHEM 1102 - General Chemistry *Units: 5*
- CHEM 1103 - General Chemistry *Units: 5*
- CHEM 2200 - Quantitative Analysis *Units: 5*
- MATH 1304 - Calculus I *Units: 4*
- MATH 1305 - Calculus II *Units: 4*
- MATH 2304 - Calculus III *Units: 4*
- MATH 2101 - Elements of Linear Algebra *Units: 4*
- PHYS 1001 - General Physics: Newtonian Mechanics and Oscillations *Units: 5*
- PHYS 1002 - General Physics: Thermodynamics and Optics *Units: 5*
- PHYS 1003 - General Physics: Electromagnetism *Units: 5*

One of the following:

- CS 1020 - Introduction to Computers *Units: 4*

- CS 1080 - Introduction to Media Computation *Units: 4*
- CS 1160 - Introduction to Computer Science I *Units: 4*

II. Upper Division (44 units)

- CHEM 3301 - Organic Chemistry *Units: 5*
- CHEM 3302 - Organic Chemistry *Units: 5*
- CHEM 3303 - Organic Chemistry *Units: 5*
- CHEM 3511 - Physical Chemistry Lecture *Units: 3*
- CHEM 3512 - Physical Chemistry Lecture *Units: 3*
- CHEM 3513 - Physical Chemistry Lecture *Units: 3*
- CHEM 3531 - Physical Chemistry Laboratory *Units: 2*
- CHEM 3532 - Physical Chemistry Laboratory *Units: 2*
- CHEM 4161 - Advanced Inorganic Chemistry *Units: 3*
- CHEM 4162 - Advanced Inorganic Chemistry *Units: 3*
- CHEM 4180 - Inorganic Chemistry Laboratory *Units: 2*
- CHEM 4240 - Instrumental Methods of Analysis *Units: 4*

- CHEM 4411 - General Biochemistry *Units: 4*
or
- CHEM 3400 - Introductory Biochemistry *Units: 4*

III. Electives (9-10 units)

A. At least two courses chosen from the following:

- CHEM 4311 - Advanced Organic Chemistry *Units: 4*
- CHEM 4412 - General Biochemistry *Units: 4*
- CHEM 4430 - General Biochemistry Laboratory *Units: 4*
- CHEM 4521 - Elements of Chemical Thermodynamics *Units: 4*
- CHEM 4601 - Environmental Chemistry I *Units: 4*
- CHEM 4602 - Environmental Chemistry II *Units: 4*
- CHEM 4810 - Undergraduate Research *Units: 2*

B. Additional courses chosen from the above list of electives or from the following:

- CHEM 4413 - General Biochemistry *Units: 4*
- CHEM 4700 - Survey of Chemical Literature *Units: 2*
- CHEM 4811 - Senior Thesis *Units: 2*
- CHEM 4900 - Independent Study *Units: 1-4*

Note:

(No more than four units of CHEM 4810 and CHEM 4811 and CHEM 4900 combined may be applied to the Advanced Chemistry Electives for the B.S. degree major.) Graduate courses (numbered 6000 or above) may be taken to satisfy this requirement.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S.

Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Chemistry, Chemistry Education Option, B.A.

Program Description

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The undergraduate programs offered by the department include: Chemistry, B.S.; Biochemistry, B.S.; Chemistry, Forensic Science Option, B.S.; Chemistry, B.A.; Chemistry, Chemistry Education Option, B.A.; Biochemistry, B.A.; Biochemistry, Chemistry Education Option, B.A.; and a Chemistry Minor. Descriptions of these programs and their requirements are listed below. (See the Department of Chemistry and Biochemistry (Graduate) for descriptions of the department's Chemistry, M.S. and M.S. Option in Biochemistry.)

The Chemistry, B.S. degree is approved by the American Chemical Society (ACS). A certified degree is a valuable credential that serves as national-level recognition for completing a rigorous academic chemistry curriculum in an ACS-approved department. The extra rigor of an ACS certified degree is valued by both potential employers and graduate schools.

Mission Statement

It is imperative that CSUEB chemistry students possess sufficient theoretical and practical training in chemistry and biochemistry so that they will be able to assume the significant technical responsibilities required by the chemical and biotechnology industries that will employ them. It is important that our students are not only trained in chemistry (and biochemistry), but will become respected scientists and research technicians. In addition, it is important that students planning for entrance into Ph.D. programs or pre-professional programs are more than adequately prepared for entrance into these programs.

Student Learning Outcomes

Students graduating with a Bachelor's degree in Chemistry or Biochemistry from Cal State East Bay will be able to:

1. Demonstrate knowledge in the various areas of chemistry, including inorganic chemistry, analytical chemistry, organic chemistry, physical chemistry, and biochemistry.
2. Work effectively and safely in a laboratory environment to perform experimental procedures and operate modern chemical/biochemical instruments.
3. Use quantitative reasoning to analyze chemical problems and evaluate chemical data.
4. Write and speak clearly on chemical or biochemical issues.
5. Work collaboratively in teams to solve chemical problems.

Career Opportunities

Analytical Chemist
Biotechnologist
Biochemist
Biophysicist
Chemical Engineer
Chemist
Dietitian
Environmental Chemist

Food and Drug Inspector
Forensic Chemist
Geochemist
Geophysicist
Health Professional
Materials Scientist
Organic Chemist
Perfumer
Petrologist
Pharmacist
Pharmaceutical Chemist
Physical Chemist
Pollution Control
Professor
Public Health Educator
Quality Control Technician
Teacher
Water Purification Chemist

Features

The Department of Chemistry and Biochemistry employs highly qualified and experienced technical staff to assist faculty and students in their course and research experiences.

The Department of Chemistry and Biochemistry maintains laboratory equipment and instruments typical of comparable institutions. These include a 500 MHz nuclear magnetic resonance (NMR) spectrometer; UV-Visible (diode array), infrared and atomic absorption (AA: flame, graphite furnace and cold vapor) spectrophotometers; high performance liquid chromatograph (HPLC) and ion chromatograph (IC); an FTIR spectrometer; and capillary gas chromatograph/mass spectrometer (GC/MS). Other specialized equipment includes a research-grade dry box, growth chamber, anaerobic chamber, and environmental field sampling equipment. There are PC-controlled and various desktop versions of the HPLC and visible spectrometers. A molecular modeling facility is also available for instruction and research.

The university offers Cooperative Education coursework which provides chemically related employment opportunities and students may, with department approval, obtain credit for this work.

The Alchemist Club, a student affiliate of the American Chemical Society, is available to students majoring in Chemistry. They are active in many aspects of the department and provide free peer tutoring, participate in fund-raising for special projects, and take interesting field trips to local industries.

Preparation and Prerequisites

For Advanced Placement course equivalencies, see Registration. Prerequisite courses for all chemistry courses must be passed with a grade of "C-" or better. Requests for Grade Forgiveness will be allowed only on a space-available basis.

Major Requirements (B.A.)

B.A. Chemistry, Option in Chemistry Education

The Bachelor of Arts degree, major in Chemistry with an option in Chemistry Education, is designed for students interested in a career teaching chemistry at the high school level, but also prepares students to work in the chemical industry. This program prepares graduates to enter a single subject credential program. The major is also compatible with participation in the Bachelor's Plus Early Pathway program, which allows completion of both the Bachelor's degree and a teaching credential in four years. The major in Chemistry with a Chemistry Education option consists of 100 units; the B.A. degree requires a total of 180 units.

1. Lower Division (54 units)

- BIOL 1000 - Basic Concepts in Biology *Units: 5*

- CHEM 1101 - General Chemistry *Units: 5*
- CHEM 1102 - General Chemistry *Units: 5*
- CHEM 1103 - General Chemistry *Units: 5*
- CHEM 2200 - Quantitative Analysis *Units: 5*
- GEOL 1000 - Earth Systems Science *Units: 5*
- MATH 1304 - Calculus I *Units: 4*
- MATH 1305 - Calculus II *Units: 4*

- CS 1020 - Introduction to Computers *Units: 4*
or
- CS 1160 - Introduction to Computer Science I *Units: 4*

- PHYS 2701 - Introductory Physics: Force, Mass and Motion *Units: 4*
- PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*
- PHYS 2703 - Introductory Physics: Light and Modern Physics *Units: 4*

2. Upper Division (46 units)

- CHEM 3200 - Bioanalytical and Forensic Instrumentation *Units: 4*
- CHEM 3301 - Organic Chemistry *Units: 5*
- CHEM 3302 - Organic Chemistry *Units: 5*
- CHEM 3303 - Organic Chemistry *Units: 5*
- CHEM 3400 - Introductory Biochemistry *Units: 4*
- CHEM 3501 - Biophysical Chemistry *Units: 4*
- CHEM 4400 - Instructional Activities in Chemistry *Units: 2*
- CHEM 4601 - Environmental Chemistry I *Units: 4*
- CHEM 4602 - Environmental Chemistry II *Units: 4*
- CHEM 4700 - Survey of Chemical Literature *Units: 2*
- PHIL 3335 - Science, Technology and Values *Units: 4*
- TED 3001 - Exploring Education *Units: 3*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Chemistry, Forensic Science Option, B.S.

Program Description

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The undergraduate programs offered by the department include: Chemistry, B.S.; Biochemistry, B.S.; Chemistry, Forensic Science Option, B.S.; Chemistry, B.A.; Chemistry, Chemistry Education Option, B.A.; Biochemistry, B.A.; Biochemistry, Chemistry Education Option, B.A.; and a Chemistry Minor. Descriptions of these programs and their requirements are listed below. (See the Department of Chemistry and Biochemistry (Graduate) for descriptions of the department's Chemistry, M.S. and M.S. Option in Biochemistry.)

The Chemistry, B.S. degree is approved by the American Chemical Society (ACS). A certified degree is a valuable credential that serves as national-level recognition for completing a rigorous academic chemistry curriculum in an ACS-approved department. The extra rigor of an ACS certified degree is valued by both potential employers and graduate schools.

Mission Statement

It is imperative that CSUEB chemistry students possess sufficient theoretical and practical training in chemistry and biochemistry so that they will be able to assume the significant technical responsibilities required by the chemical and biotechnology industries that will employ them. It is important that our students are not only trained in chemistry (and biochemistry), but will become respected scientists and research technicians. In addition, it is important that students planning for entrance into Ph.D. programs or pre-professional programs are more than adequately prepared for entrance into these programs.

Student Learning Outcomes

Students graduating with a Bachelor's degree in Chemistry or Biochemistry from Cal State East Bay will be able to:

1. Demonstrate knowledge in the various areas of chemistry, including inorganic chemistry, analytical chemistry, organic chemistry, physical chemistry, and biochemistry.
2. Work effectively and safely in a laboratory environment to perform experimental procedures and operate modern chemical/biochemical instruments.
3. Use quantitative reasoning to analyze chemical problems and evaluate chemical data.
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5. Work collaboratively in teams to solve chemical problems.

Career Opportunities

Analytical Chemist
Biotechnologist
Biochemist
Biophysicist
Chemical Engineer
Chemist
Dietitian
Environmental Chemist
Food and Drug Inspector
Forensic Chemist
Geochemist
Geophysicist
Health Professional
Materials Scientist
Organic Chemist
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Teacher
Water Purification Chemist

Features

The Department of Chemistry and Biochemistry employs highly qualified and experienced technical staff to assist faculty and students in their course and research experiences.

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The Alchemist Club, a student affiliate of the American Chemical Society, is available to students majoring in Chemistry. They are active in many aspects of the department and provide free peer tutoring, participate in fund-raising for special projects, and take interesting field trips to local industries.

Preparation and Prerequisites

For Advanced Placement course equivalencies, see Registration. Prerequisite courses for all chemistry courses must be passed with a grade of "C-" or better. Requests for Grade Forgiveness will be allowed only on a space-available basis.

Sample Program

A Sample Program for this degree can be found at the department website: <http://www20.csueastbay.edu/csci/departments/chemistry/index.html>.

Major Requirements (B.S.)

B.S. Chemistry, Option in Forensic Science

The Bachelor of Science degree, major in Chemistry with an option in Forensic Science, is designed to prepare students for careers as forensic chemists. This program also provides students with the necessary background to pursue graduate study in forensic science. The major in Chemistry with a Forensic Science option consists of 112 units; the B.S. degree requires a total of 180 units.

I. Lower Division (63 units)

- BIOL 1401 - Molecular and Cellular Biology *Units: 5*
- BIOL 1402 - Plant Biology *Units: 5*
- BIOL 1403 - Animal Biology *Units: 5*
- CHEM 1101 - General Chemistry *Units: 5*
- CHEM 1102 - General Chemistry *Units: 5*
- CHEM 1103 - General Chemistry *Units: 5*
- CHEM 2200 - Quantitative Analysis *Units: 5*
- CRJA 2200 - Basic Criminal Investigation *Units: 4*
- MATH 1304 - Calculus I *Units: 4*
- MATH 1305 - Calculus II *Units: 4*
- MATH 2304 - Calculus III *Units: 4*
- PHYS 2701 - Introductory Physics: Force, Mass and Motion *Units: 4*
- PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*
- PHYS 2703 - Introductory Physics: Light and Modern Physics *Units: 4*

II. Upper Division (49 units)

- BIOL 3121 - Principles of Genetics *Units: 5*
- BIOL 4485 - PCR, DNA Sequencing and Fragment Analysis *Units: 4*
- BIOL 4830 - Seminar in Forensic Research *Units: 1*
- CHEM 3200 - Bioanalytical and Forensic Instrumentation *Units: 4*
- CHEM 3301 - Organic Chemistry *Units: 5*
- CHEM 3302 - Organic Chemistry *Units: 5*
- CHEM 3303 - Organic Chemistry *Units: 5*
- CHEM 3400 - Introductory Biochemistry *Units: 4*
- CHEM 3511 - Physical Chemistry Lecture *Units: 3*
- CHEM 3512 - Physical Chemistry Lecture *Units: 3*
- CHEM 4240 - Instrumental Methods of Analysis *Units: 4*
- CHEM 4830 - Seminar in Forensic Research *Units: 1*
- CRJA 3800 - Comparative Evidence and Its Evaluation *Units: 4*
- CRJA 4830 - Seminar in Forensic Research *Units: 1*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Communication, Media Production Option, B.A.

Program Description

The Communication Department features the integration of theories and criticism with the essential skills for media production, professional engagement, and meaningful research. Graduates will be able to make a positive, professional, and important contribution in Media Environments, Digital Journalism, Organizational Contexts, Advertising, Public Relations, and Communication and Media Studies. Students will study, research and analyze the perspectives that will lead to their becoming inclusive, ethical, and effective leaders and participants in global and local communities. They will acquire skills in critical analysis, speaking, writing, and visual presentations across all media. They will learn about the changing world of today's media as well as the long history of the relationship between communication, self, and society and they will be prepared for a broad array of careers. All graduates must complete 13 core courses in communication and elect one of two options: Communication, Media Production Option, B.A. emphasizing digital journalism that converges print, audio, visual, and video; Communication, Professional, Public and Organizational Communication Option, B.A. that converges the study of Advertising, Public Relations and Organizational Communication.

Student Learning Outcomes

Students graduating with a B.A. in Communication from Cal State East Bay will be able to:

1. Create, analyze, edit, and respond to written, spoken, and visual messages in multiple formats and contexts.
2. Research and evaluate effective communication including design and production techniques and quantitative, qualitative, and critical inquiry.
3. Effectively communicate as leaders and participants in collaborative and individual contexts involving divergent ideas, conflicts, and relationships across cultural and gender differences.
4. Explain and illustrate the construction and maintenance of shared communities that influence and are influenced by communication using critical, cultural, racial, socio-political, gender and justice perspectives.
5. Explain and illustrate concepts of ethical and democratic leadership applying major communication perspectives, including rhetorical and discursive processes, purposes, and relevant media.
6. Explain and illustrate the role identity plays in communication within global and local contexts and in negotiating paradoxes of participation.

Career Opportunities

Communication skills are essential in both work and social settings. Recruiters and placement officers for all types of organizations and positions rank oral and written communication skills at the very top of the list. The department's graduates have entered the following careers:

- Advertising Executive
- Business Executive
- Communication Specialist
- Consultant
- Copy Editor
- Copywriter
- Corporate Communications Director
- Corporate Communicator
- Critic
- Customer Service Representative
- Debate Speech Coach
- Employee Relations Representative
- Film Editor
- Graphic Artist
- Human Resource Administrator
- Impression Management Specialist
- Interviewer
- Journalist
- Media Consultant
- Media Specialist
- News Director
- Newscaster
- News Writer
- Photojournalist
- Professor
- Public Information Specialist
- Public Relations Representative
- Publications
- Radio Programmer
- Sales Representative
- Specification Writer
- Talk Show Host
- Teacher
- Technical Writer
- Television Producer
- Trainer
- Writer

Features

The Communication Department is honored and responsible for:

The Pioneer, the University's weekly student newspaper, currently distributed on our campus and to 150 stands in 7 surrounding communities, from Fremont to San Lorenzo including 5 BART stations as well globally through The Pioneer Online <http://www.thepioneeronline.com/>

Pioneer Web TV <http://pioneerwebvideo.com/>. Students gain experience working in a professional television and film studio producing the weekly Pioneer Web TV News Show and increasingly a number of pilot shows.

Pioneer Web Radio. http://www.pioneerwebtv.com/Pioneer_Web_TV/Podcast.html. Students gain professional experience with an Internet radio start-up and providing the campus communities with news, event updates, special profiles and web-streaming for concerts.

Pioneer Advertising Agency. Students gain experience working in and studying an actual Advertising Agency. They sell Ads for the *Pioneer Newspaper*, design and implement strategies to sell ads for *The Pioneer On-line*, and commercials for *Pioneer Web TV*.

The Communication Lab. The department sponsors this Communication Laboratory which is open to the campus community that provides communication-related support services. Upper division Communication majors and graduate students serve as tutors who help students research, organize, outline, and deliver oral presentations. The department also offers campus internship programs for credit, and each year awards a number of scholarships to Communication majors. Junior, senior and graduate students are trained to be tutors to all students enrolled in the G.E. required course in Public Speaking. Communication Tutors assist students in the preparation and presentation of public speeches in a supportive environment.

The department has affiliations with the National Communication Association, Association of Schools of Journalism and Mass Communication, the Association for Education in Journalism and Mass Communication, the California Newspaper Publishers Association, and the California Intercollegiate Press Association. The department also sponsors a campus chapter of the Society of Professional Journalists and the Public Relations Student Society of America.

Major Requirements (B.A.)

Because requirements are subject to change, consult an advisor in the Department of Communication for clarification and interpretation of your major requirements. The major in Communication consists of 52 units of core courses in communication, with an additional 44 units in one of two options for a total of 96 units; the B.A. degree requires a total of 180 units.

Required Core Courses (52 units)

- COMM 2201 - Argumentation and Debate *Units: 4*
- COMM 2300 - 21st Century Communication *Units: 4*
- COMM 2320 - Communication Writing and Design *Units: 4*
- COMM 3000 - History and Criticism Communication *Units: 4 (if not used to satisfy a requirement in the Professional, Public and Organizational Communication or Media Production Options)*
- COMM 3003 - Philosophy and Theory of Communication *Units: 4 (if not used to satisfy a requirement in the Professional, Public and Organizational Communication Option)*
- COMM 3002 - Communication, Media and Culture *Units: 4*
- COMM 3004 - Quantitative Communication Research Methods *Units: 4*
- COMM 3005 - Qualitative Communication Research Methods *Units: 4*
- COMM 3107 - Introduction to Organizational Communication *Units: 4*
- COMM 3510 - Small Group Communication *Units: 4*
- COMM 3530 - Interviewing Principles and Practices *Units: 4*
- COMM 4205 - Ethics and Law in Communication *Units: 4*

- COMM 4300 - Intercultural & International Communication *Units: 4*
or
- COMM 4500 - Gender Identity and Representation in Media *Units: 4*

- COMM 4510 - Public Relations Theory and Practice *Units: 4*

Options (44 units)

Students must complete one of the two following options in addition to completing the prerequisites and required core courses listed above:

Media Production Option (44 units)

- COMM 2200 - Introduction to Journalistic Writing *Units: 4*

- COMM 3000 - History and Criticism Communication *Units: 4 (if not used to satisfy a Required Core Course), or*
- COMM 4150 - Media and Government *Units: 4*
- COMM 3010 - Intermediate News Writing and Editing *Units: 4*
- COMM 3100 - Introduction to Professional Video Production *Units: 4*
- COMM 4006 - Intermediate Video Production *Units: 4*
- COMM 4890 - Senior Project: Media Production *Units: 4*

Workshop Lab (Practicum):

Select four courses (8 units) from the following:

- COMM 3220 - Media Workshop: Print *Units: 2*
- COMM 3221 - Media Workshop: Magazine and Feature Writing *Units: 2*
- COMM 3222 - Media Workshop: Editorial and Opinion Writing *Units: 2*
- COMM 3223 - Media Workshop: Advertising and Public Relations *Units: 2*
- COMM 3224 - Media Workshop: Internet *Units: 2*
- COMM 3232 - Media Workshop: Video/Documentary *Units: 2*

Electives (12 units):

Courses may be taken within or outside the COMM department. Approval of advisor required.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Communication, Professional, Public and Organizational Communication Option, B.A.

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- Interviewer
- Journalist
- Media Consultant
- Media Specialist
- News Director
- Newscaster
- News Writer
- Photojournalist
- Professor
- Public Information Specialist
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- Specification Writer
- Talk Show Host
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- COMM 3003 - Philosophy and Theory of Communication *Units: 4 (if not used to satisfy a requirement in the Professional, Public and Organizational Communication Option)*
- COMM 3002 - Communication, Media and Culture *Units: 4*
- COMM 3004 - Quantitative Communication Research Methods *Units: 4*
- COMM 3005 - Qualitative Communication Research Methods *Units: 4*
- COMM 3107 - Introduction to Organizational Communication *Units: 4*
- COMM 3510 - Small Group Communication *Units: 4*
- COMM 3530 - Interviewing Principles and Practices *Units: 4*
- COMM 4205 - Ethics and Law in Communication *Units: 4*

- COMM 4300 - Intercultural & International Communication *Units: 4*
or
- COMM 4500 - Gender Identity and Representation in Media *Units: 4*

- COMM 4510 - Public Relations Theory and Practice *Units: 4*

Options (44 units)

Students must complete one of the two following options in addition to completing the prerequisites and required core courses listed above:

Professional, Public and Organizational Communication Option (44 units)

- COMM 3000 - History and Criticism Communication *Units: 4 (if not used to satisfy a Required Core Course),*
or
- COMM 3003 - Philosophy and Theory of Communication *Units: 4 (if not used to satisfy a Required Core Course)*
- COMM 3204 - Reason in Controversy *Units: 4*
- COMM 3560 - Persuasion Theory and Practice *Units: 4*
- COMM 4107 - Relational Communication in Organizations *Units: 4*
- COMM 4207 - Organizational Transformation *Units: 4*
- COMM 4520 - Advertising Form and Function *Units: 4*
- COMM 4880 - Conflict Management *Units: 4*
- COMM 4885 - Senior Project: Professional, Public and Organizational Communication *Units: 4*

Electives (12 units):

Courses may be taken within or outside the COMM department. Approval of advisor required.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Computer Engineering, B.S.

Program Description

Computer engineers are involved in all aspects of computing, from the design of individual microprocessors, personal computers, and supercomputers, to circuit design, as well as the integration of computer systems into other kinds of systems (a motor vehicle, for example, has a number of subsystems that are computer oriented). Common computer engineering tasks include writing embedded software for real-time micro-controllers, working sensors, designing mixed signal circuit boards, and designing operating systems.

Industrial Engineering is the profession concerned with solving engineering problems by applying scientific logic and systems methodology and by utilizing information, energy, materials, facilities, and personnel most effectively. Its objectives are to improve quality, increase efficiency and reduce costs associated with the production of goods and services and to act as the interface between technology and humans. Engineering methods and practical knowledge are used in formulating decision models for the optimum application of engineering principles. The Industrial Engineering Program is accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, Telephone: (410) 347-7700

Mission Statement

The Engineering program at California State University, East Bay provides a quality engineering education that prepares its graduates for employment related to their major and with an aptitude for continued learning. The program provides students with technical and problem solving capabilities, an understanding of real-world business often through practical experience, and excellent teamwork and communications skills. It promotes a high rate of student success in completing the program in a reasonable length of time and enables the transfer students to take no longer than native students in completing the upper division portion. Students graduate from the program with a high degree of satisfaction about their education. Faculty maintain a high level of currency in the discipline through a strong program of professional development and interaction with the Industrial Advisory Board.

Program Educational Objectives

The Department of Engineering provides a quality engineering education that produces graduates who:

- successfully apply their learned skills throughout their professional pursuits,
- have enthusiasm and aptitude to continuously pursue learning and professional development,
- have demonstrated in their professional performance an ability to work independently and to communicate and work well on teams alongside engineers and colleagues from other disciplines,
- are recognized as qualified engineers with high ethical standards.
- **Student Learning Outcomes**

Students graduating with a B.S. degree in Computer Engineering or a B.S. in Industrial Engineering from Cal State East Bay will be able to:

1. Apply knowledge of mathematics, science, and engineering.
2. Design and conduct experiments, as well as to analyze and interpret data.
3. Design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
4. Function on multidisciplinary teams.
5. Identify, formulate and solve engineering problems.
6. Understand professional and ethical responsibility.
7. Communicate effectively.
8. Understand the impact of engineering solutions in a global, economic, environmental, and societal context.
9. Recognize the need for, and have an ability to engage in, life-long learning.
10. Have knowledge of contemporary issues.
11. Use the techniques, skills, and modern engineering tools necessary for engineering practice.

Career Opportunities

Computer engineers can work in a variety of industries, including aerospace, automotive, communication designing hardware and software for computers and embedded systems.

Industrial engineers can work in a variety of capacities, including engineering management, industrial engineer, manufacturing engineer, quality engineer, project manager and system analyst.

Features

Students interested in Engineering at Cal State East Bay may complete the first two years at a local community college. In so doing, it is important to determine, prior to taking courses, if the community college courses chosen have been articulated with the Cal State East Bay Engineering curriculum. Engineering senior design projects will be offered in conjunction with local industry.

Preparation

Prospective Engineering students should complete four years of high school mathematics, a year each of high school chemistry and physics with labs, and a computer programming course if available.

Major Requirements

B.S. Computer Engineering

The major consists of 138 units. The B.S. Degree requires 194 units. Students are required to earn a grade "C" or better in MATH 1304, MATH 1305, and MATH 2304.

I. Lower Division (72 units)

- CHEM 1101 - General Chemistry *Units: 5*
- CS 1160 - Introduction to Computer Science I *Units: 4*
- CS 2360 - Introduction to Computer Science II *Units: 4*
- CS 2370 - Introduction to Computer Science III *Units: 4*
- CS 2430 - Computer Organization and Assembly Language Programming *Units: 4*
- ECON 2301 - Principles of Microeconomics *Units: 4*
- ENGR 1011 - Engineering: An Introduction *Units: 3*
- ENGR 1420 - Engineering Graphics *Units: 2*
- ENGR 2010 - Electric Circuit Theory I *Units: 3*
- ENGR 2060 - Materials Science *Units: 4*
- MATH 1304 - Calculus I *Units: 4*
- MATH 1305 - Calculus II *Units: 4*
- MATH 2101 - Elements of Linear Algebra *Units: 4*
- MATH 2304 - Calculus III *Units: 4*
- MATH 2150 - Discrete Structures *Units: 4*
- PHYS 1001 - General Physics: Newtonian Mechanics and Oscillations *Units: 5*
- PHYS 1002 - General Physics: Thermodynamics and Optics *Units: 5*
- PHYS 1003 - General Physics: Electromagnetism *Units: 5*

Note:

Most of the lower division ENGR courses are available at local community colleges. Community college students should take them prior to transferring to Cal State East Bay.

I. Upper Division Core Requirements (58 units)

- CMPE 3010 - Electric Circuit Theory II *Units: 4*
- CMPE 4610 - Senior Design I *Units: 3*
- CMPE 4620 - Senior Design II *Units: 3*
- CS 3240 - Data Structures and Algorithms *Units: 4*
- CS 3430 - Computer Architecture *Units: 4*
- CS 3432 - Digital Design Lab *Units: 4*
- CS 3434 - Microprocessor Lab *Units: 4*
- CS 3752 - Introduction to Digital Signal Processing *Units: 4*
or cross-listed: CMPE 3752
- CS 4435 - Computer Architecture II *Units: 4*
or cross-listed: CMPE 4435
- CS 4432 - VLSI Circuit Design *Units: 4*
- CS 4560 - Operating Systems *Units: 4*
- INDE 3101 - Statics and Dynamics *Units: 4*
- INDE 3140 - Engineering Economy *Units: 4*
or cross-listed: ECON 3140
- MATH 3331 - Differential Equations *Units: 4*
- STAT 3601 - Statistics and Probability for Science and Engineering I *Units: 4*
or cross-listed: INDE 3601

II. Electives (8 units)

Choice of two courses from the following:

- CS 3120 - Programming Language Concepts *Units: 4*
- CS 3560 - Introduction to Systems Programming *Units: 4*
- CS 3590 - Data Communications and Networking *Units: 4*

- CS 4310 - Software Engineering I *Units: 4*
- CS 4590 - Computer Networks *Units: 4*
- CS 4594 - Broadband Networks and Communications *Units: 4*
- CS 4596 - Wireless and Mobile Networking *Units: 4*
- CS 4840 - Computer Graphics *Units: 4*
- ENGR 6200 - Project Management *Units: 4*
- ENGR 6300 - Applied Quality Assurance *Units: 4*
or cross-listed: STAT 6300
- ENGR 6400 - Research Methods in Engineering Management *Units: 4*
or other 3000 and 4000 level courses with department approval
- INDE 3190 - Human Factors Engineering *Units: 4*
or cross-listed: PSYC 3190
- INDE 4200 - Systems Simulation *Units: 4*
- INDE 4280 - Design and Management of Human Work Systems *Units: 4*
- INDE 4300 - Quality Engineering *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Computer Science, B.S.

Program Description

Programs in Computer Science at Cal State East Bay are designed to prepare students for employment or for advanced study in computer science. The student's course of study will provide a solid foundation of theoretical knowledge as well as experience with practical applications in hardware and software.

Computer Science is the study of computation and of methods for addressing, processing, storing, and transmitting information. It encompasses a broad perspective that includes what a computer is, its uses and applications, and theoretical approaches to what can be computed. The core curriculum in Computer Science, involving a blend of theory and practice, offers opportunities for problem solving in many areas and provides experience with a variety of computers, computer languages, and software packages. A typical student's experience can include scientific programming, language design and implementation, file handling and database design, data communication and networking, artificial intelligence, hardware design, and graphic implementations ranging from interface design to artistic presentations.

A strong mathematical background is important in Computer Science. High school students who are interested in computer science should take as much mathematics as possible, particularly algebra, trigonometry, and precalculus. Community college students who are planning to transfer to Cal State East Bay should take a two-course calculus sequence, linear algebra, discrete structures, a sequence of courses in some programming language (such as C, C++, Java), and a course in computer organization and assembly language.

Student Learning Outcomes

Students graduating with a B.S. in Computer Science from Cal State East Bay will be able to:

1. Apply knowledge of mathematics and computational theory to appropriate problems in computer science;
2. Analyze a problem, and identify and define the resources and requirements needed for its solution;
3. Design and implement a program to meet stated needs;
4. Develop and maintain computer-based systems, processes, and platforms
5. Recognize the mechanisms, components and architecture of computing systems
6. Employ current techniques, skills, and tools necessary for computing practice
7. Identify professional, ethical, legal, and security issues and responsibilities and the impact of computing on individuals, organizations, and society

8. Perform successfully on teams to accomplish a common goal, and communicate effectively in written and oral form.

Career Possibilities

- Computer Network Support Employee
- Computer Operations Manager
- Computer Sales Representative
- Customer Support Employee
- Database Applications Program Analyst or Designer
- Graphics Specialist
- Programmer or Administrator
- Programming Team Member, Specializing in Design, Testing, or Documentation
- Scientific Applications Programmer
- Software Engineer Systems Analyst
- Systems Manager or Programmer
- Technical Writer
- Teacher/Professor

Features

The University supports Computer Science with a variety of resources. Smart classrooms are equipped with at least one computer and projector. Several instructional classrooms also have student computers. Students may use computers in open-access labs; there is wireless access. Lab and classroom computers may be equipped with a variety of operating systems. Student dorm rooms are equipped high-speed Internet access.

The College of Science sponsors CompCore, a small scale parallel processing facility with facilities for immersive 3-D graphics, scientific modeling, remote access to scientific instruments, and other facilities for experimentation and research. In addition, some computer science faculty have small labs dedicated to research and to use by students in their classes.

Each year the department offers a number of scholarships covering a portion of fees for the subsequent year. Applications may be obtained from the department during Winter quarter.

A booklet containing sample schedules, as well as further information about the computer science major, is available in the Mathematics/Computer Science Student Service Center (North Science 337). This information may be obtained electronically at <http://www.mcs.csueastbay.edu>.

Preparation

For Advanced Placement course equivalencies, see Registration.

Major Requirements (B.S.)

Many students pursue a double major in Mathematics and Computer Science, since a number of courses are common to both majors and can be double-counted. Another popular combination is a major in computer science and a minor in mathematics.

Please consult an advisor in your major department for clarification and interpretation of your major requirements. Computer Science majors may complete the following 84-unit program or may elect to complete a 92-unit option in Computer Engineering, Networking and Data Communications, or Software Engineering (see "Options" section). The B.S. degree requires a total of 180 units.

All Computer Science majors must complete each of the following courses in sections I, II, and III with a grade of "C" or better.

I. Mathematics (20 units)

Five courses are required:

- MATH 1304 - Calculus I *Units: 4*

- MATH 1305 - Calculus II *Units: 4*
- MATH 2101 - Elements of Linear Algebra *Units: 4*
- MATH 2150 - Discrete Structures *Units: 4*

Choice of:

- STAT 3401 - Introduction to Probability Theory I *Units: 4*
- STAT 3502 - Statistical Inference I *Units: 4*
- STAT 3601 - Statistics and Probability for Science and Engineering I *Units: 4*
or crosslisted ENGR 3601; STAT 3601 is recommended.

Note:

A student who has recently taken a pre-calculus course in high school should be prepared to begin the calculus sequence. A student with three years of high school mathematics, including two years of algebra and one year of geometry, should be prepared to take MATH 1130, or possibly MATH 1300. Students who are unsure about what mathematics course to take should call the department office for advice.

It should be noted that students may not enroll in any baccalaureate level mathematics or computer science class unless they have met the Entry Level Mathematics (ELM) requirement or are exempt from it. Information about the ELM is available from the Testing Office at (510) 885-3661.

II. Lower Division Computer Science (16 units)

Required courses:

- CS 1160 - Introduction to Computer Science I *Units: 4*
- CS 2360 - Introduction to Computer Science II *Units: 4*
- CS 2370 - Introduction to Computer Science III *Units: 4*
- CS 2430 - Computer Organization and Assembly Language Programming *Units: 4*

Note:

Although CS 1160 is the required introductory course for Computer Science majors, it may be difficult for students with no experience using computers. Students who do not know how to use a word processor or who have no knowledge of computer files and operating systems should consider taking CS 1020 (Introduction to Computers) before taking CS 1160.

Students who have completed a multi-quarter course in C, C++, Java, or Pascal at another college should consult the Mathematics/Computer Science Department; they may be able to substitute their previous coursework for CS 1160 and possibly CS 2360 and 2370.

III. Upper Division Computer Science: Required Courses (20 units)

- CS 3120 - Programming Language Concepts *Units: 4*
- CS 3240 - Data Structures and Algorithms *Units: 4*
- CS 3340 - Introduction to Object-Oriented Programming and Design *Units: 4*
- CS 3430 - Computer Architecture *Units: 4*
- CS 4560 - Operating Systems *Units: 4*

IV. Upper Division Computer Science: Concentration (16 units)

The selection of all elective Computer Science courses is important in giving the major a coherence, with depth in key areas. These electives must be chosen with the assistance and approval of a faculty advisor.

A student must take four of the following eight courses:

- CS 3560 - Introduction to Systems Programming *Units: 4*
- CS 3590 - Data Communications and Networking *Units: 4*
- CS 4660 - Database Architecture *Units: 4*
- CS 4110 - Compiler Design *Units: 4*
- CS 4170 - Theory of Automata *Units: 4*
- CS 4245 - Analysis of Algorithms *Units: 4*
- CS 4310 - Software Engineering I *Units: 4*

- MATH 3750 - Numerical Analysis I *Units: 4*
or
- CS 3750 - Numerical Analysis I *Units: 4*

V. Electives (12 units)

Any of the following courses may be used in meeting this requirement. However, at least 4 units (other than units from CS 3898) must be from courses with the CS prefix.

A. Any course(s):

from IV not used in meeting the requirements in that category.

B. Any upper division course in Computer Science except:

those used in meeting requirements III or IV. No more than 4 units of CS 4900, Independent Study, and no more than 4 units of CS 3898, Cooperative Education, may be applied to the Computer Science major requirements.

C. Any graduate course in:

Computer Science (except CS 6000 and CS 6909).

D. Any upper division course in:

the Department of Mathematics and Computer Science or the Department of Statistics that is applicable to the BS degree major in Mathematics.

E. Any courses from the following list:

- CMPE 3010 - Electric Circuit Theory II *Units: 4*
- PHIL 3002 - Modern Logic *Units: 4*
- PHYS 3280 - Electronics *Units: 4*

Note:

The student is responsible for meeting all prerequisites for any of these courses. The courses in (E) have prerequisites that are not included among major requirements.

Note:

Students contemplating graduate study in Computer Science should consult with a faculty advisor early in their programs. They should be sure to include an adequate number of theory courses in their major and should have an extensive background in Mathematics.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Computer Science, Computer Engineering Option, B.S.

Program Description

Programs in Computer Science at Cal State East Bay are designed to prepare students for employment or for advanced study in computer science. The student's course of study will provide a solid foundation of theoretical knowledge as well as experience with practical applications in hardware and software.

Computer Science is the study of computation and of methods for addressing, processing, storing, and transmitting information. It encompasses a broad perspective that includes what a computer is, its uses and applications, and theoretical approaches to what can be computed. The core curriculum in Computer Science, involving a blend of theory and practice, offers opportunities for problem solving in many areas and provides experience with a variety of computers, computer languages, and software packages. A typical student's experience can include scientific programming, language design and implementation, file handling and database design, data communication and networking, artificial intelligence, hardware design, and graphic implementations ranging from interface design to artistic presentations.

A strong mathematical background is important in Computer Science. High school students who are interested in computer science should take as much mathematics as possible, particularly algebra, trigonometry, and precalculus. Community college students who are planning to transfer to Cal State East Bay should take a two-course calculus sequence, linear algebra, discrete structures, a sequence of courses in some programming language (such as C, C++, Java), and a course in computer organization and assembly language.

Student Learning Outcomes

Students graduating with a B.S. in Computer Science from Cal State East Bay will be able to:

1. Apply knowledge of mathematics and computational theory to appropriate problems in computer science;
2. Analyze a problem, and identify and define the resources and requirements needed for its solution;
3. Design and implement a program to meet stated needs;
4. Develop and maintain computer-based systems, processes, and platforms
5. Recognize the mechanisms, components and architecture of computing systems
6. Employ current techniques, skills, and tools necessary for computing practice
7. Identify professional, ethical, legal, and security issues and responsibilities and the impact of computing on individuals, organizations, and society
8. Perform successfully on teams to accomplish a common goal, and communicate effectively in written and oral form.

Career Possibilities

- Computer Network Support Employee
- Computer Operations Manager
- Computer Sales Representative
- Customer Support Employee
- Database Applications Program Analyst or Designer
- Graphics Specialist
- Programmer or Administrator
- Programming Team Member, Specializing in Design, Testing, or Documentation
- Scientific Applications Programmer
- Software Engineer Systems Analyst
- Systems Manager or Programmer
- Technical Writer
- Teacher/Professor

Features

The University supports Computer Science with a variety of resources. Smart classrooms are equipped with at least one computer and projector. Several instructional classrooms also have student computers. Students may use computers in open-access labs; there is wireless access. Lab and classroom computers may be equipped with a variety of operating systems. Student dorm rooms are equipped high-speed Internet access.

The College of Science sponsors CompCore, a small scale parallel processing facility with facilities for immersive 3-D graphics, scientific modeling, remote access to scientific instruments, and other facilities for experimentation and research. In addition, some computer science faculty have small labs dedicated to research and to use by students in their classes.

Each year the department offers a number of scholarships covering a portion of fees for the subsequent year. Applications may be obtained from the department during Winter quarter.

A booklet containing sample schedules, as well as further information about the computer science major, is available in the Mathematics/Computer Science Student Service Center (North Science 337). This information may be obtained electronically at <http://www.mcs.csueastbay.edu>.

Preparation

For Advanced Placement course equivalencies, see Registration.

Major Requirements (B.S.)

Many students pursue a double major in Mathematics and Computer Science, since a number of courses are common to both majors and can be double-counted. Another popular combination is a major in computer science and a minor in mathematics.

Please consult an advisor in your major department for clarification and interpretation of your major requirements. Computer Science majors may complete the following 84-unit program or may elect to complete a 92-unit option in Computer Engineering, Networking and Data Communications, or Software Engineering (see "Options" section). The B.S. degree requires a total of 180 units.

All Computer Science majors must complete each of the following courses in sections I, II, and III with a grade of "C" or better.

I. Mathematics (20 units)

Five courses are required:

- MATH 1304 - Calculus I *Units: 4*
- MATH 1305 - Calculus II *Units: 4*
- MATH 2101 - Elements of Linear Algebra *Units: 4*
- MATH 2150 - Discrete Structures *Units: 4*

Choice of:

- STAT 3401 - Introduction to Probability Theory I *Units: 4*
- STAT 3502 - Statistical Inference I *Units: 4*
- STAT 3601 - Statistics and Probability for Science and Engineering I *Units: 4*
or crosslisted ENGR 3601; STAT 3601 is recommended.

Note:

A student who has recently taken a pre-calculus course in high school should be prepared to begin the calculus sequence. A student with three years of high school mathematics, including two years of algebra and one year of geometry, should be prepared to take MATH 1130, or possibly MATH 1300. Students who are unsure about what mathematics course to take should call the department office for advice.

It should be noted that students may not enroll in any baccalaureate level mathematics or computer science class unless they have met the Entry Level Mathematics (ELM) requirement or are exempt from it. Information about the ELM is available from the Testing Office at (510) 885-3661.

II. Lower Division Computer Science (16 units)

Required courses:

- CS 1160 - Introduction to Computer Science I *Units: 4*
- CS 2360 - Introduction to Computer Science II *Units: 4*
- CS 2370 - Introduction to Computer Science III *Units: 4*
- CS 2430 - Computer Organization and Assembly Language Programming *Units: 4*

Note:

Although CS 1160 is the required introductory course for Computer Science majors, it may be difficult for students with no experience using computers. Students who do not know how to use a word processor or who have no knowledge of computer files and operating systems should consider taking CS 1020 (Introduction to Computers) before taking CS 1160.

Students who have completed a multi-quarter course in C, C++, Java, or Pascal at another college should consult the Mathematics/Computer Science Department; they may be able to substitute their previous coursework for CS 1160 and possibly CS 2360 and 2370.

III. Upper Division Computer Science: Required Courses (20 units)

- CS 3120 - Programming Language Concepts *Units: 4*
- CS 3240 - Data Structures and Algorithms *Units: 4*
- CS 3340 - Introduction to Object-Oriented Programming and Design *Units: 4*
- CS 3430 - Computer Architecture *Units: 4*
- CS 4560 - Operating Systems *Units: 4*

IV. Upper Division Computer Science: Concentration (16 units)

The selection of all elective Computer Science courses is important in giving the major a coherence, with depth in key areas. These electives must be chosen with the assistance and approval of a faculty advisor.

A student must take four of the following eight courses:

- CS 3560 - Introduction to Systems Programming *Units: 4*
- CS 3590 - Data Communications and Networking *Units: 4*
- CS 4660 - Database Architecture *Units: 4*
- CS 4110 - Compiler Design *Units: 4*
- CS 4170 - Theory of Automata *Units: 4*
- CS 4245 - Analysis of Algorithms *Units: 4*
- CS 4310 - Software Engineering I *Units: 4*

- MATH 3750 - Numerical Analysis I *Units: 4*
or
- CS 3750 - Numerical Analysis I *Units: 4*

V. Electives (12 units)

Any of the following courses may be used in meeting this requirement. However, at least 4 units (other than units from CS 3898) must be from courses with the CS prefix.

A. Any course(s):

from IV not used in meeting the requirements in that category.

B. Any upper division course in Computer Science except:

those used in meeting requirements III or IV. No more than 4 units of CS 4900, Independent Study, and no more than 4 units of CS 3898, Cooperative Education, may be applied to the Computer Science major requirements.

C. Any graduate course in:

Computer Science (except CS 6000 and CS 6909).

D. Any upper division course in:

the Department of Mathematics and Computer Science or the Department of Statistics that is applicable to the BS degree major in Mathematics.

E. Any courses from the following list:

- CMPE 3010 - Electric Circuit Theory II *Units: 4*
- PHIL 3002 - Modern Logic *Units: 4*
- PHYS 3280 - Electronics *Units: 4*

Note:

The student is responsible for meeting all prerequisites for any of these courses. The courses in (E) have prerequisites that are not included among major requirements.

Note:

Students contemplating graduate study in Computer Science should consult with a faculty advisor early in their programs. They should be sure to include an adequate number of theory courses in their major and should have an extensive background in Mathematics.

Options

The major with one of the following three options consists of 92 units. In addition to the 20 units of mathematics courses (Section I), the 16 units of lower division computer science courses (Section II), and the 20 units of upper division computer science courses (Section III) required for a B.S. degree major in computer science, students choosing an option in Computer Engineering, Networking and Data Communications, or Software Engineering must complete an additional 36 units. See below.

Computer Engineering Option (36 units)

The Option in Computer Engineering emphasizes the design of computer hardware and software and the close interaction between the two. It is an area of study with many issues, ranging from the design and development of large scale systems requiring an integration of hardware and software, to the design and deployment of special purpose devices used for control of physical processes. The option provides a foundation of knowledge for immediate application, but also provides a background for further study in the field.

a. Computer Engineering Concentration (24 units)

- CS 3432 - Digital Design Lab *Units: 4*
- CS 3434 - Microprocessor Lab *Units: 4*
- CS 3590 - Data Communications and Networking *Units: 4*
- CS 4435 - Computer Architecture II *Units: 4*
- CS 4432 - VLSI Circuit Design *Units: 4*

- PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*

b. Computer Engineering Electives (12 units)

Choice of three courses from the following:

- CS 3560 - Introduction to Systems Programming *Units: 4*
- CS 4310 - Software Engineering I *Units: 4*
- CS 4590 - Computer Networks *Units: 4*
- CS 4594 - Broadband Networks and Communications *Units: 4*
- CS 4596 - Wireless and Mobile Networking *Units: 4*
- CS 4840 - Computer Graphics *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Computer Science, Networking and Data Communications Option, B.S.

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A strong mathematical background is important in Computer Science. High school students who are interested in computer science should take as much mathematics as possible, particularly algebra, trigonometry, and precalculus. Community college students who are planning to transfer to Cal State East Bay should take a two-course calculus sequence, linear algebra, discrete structures, a sequence of courses in some programming language (such as C, C++, Java), and a course in computer organization and assembly language.

Student Learning Outcomes

Students graduating with a B.S. in Computer Science from Cal State East Bay will be able to:

1. Apply knowledge of mathematics and computational theory to appropriate problems in computer science;
2. Analyze a problem, and identify and define the resources and requirements needed for its solution;
3. Design and implement a program to meet stated needs;
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5. Recognize the mechanisms, components and architecture of computing systems
6. Employ current techniques, skills, and tools necessary for computing practice
7. Identify professional, ethical, legal, and security issues and responsibilities and the impact of computing on individuals, organizations, and society
8. Perform successfully on teams to accomplish a common goal, and communicate effectively in written and oral form.

Career Possibilities

- Computer Network Support Employee
- Computer Operations Manager
- Computer Sales Representative
- Customer Support Employee
- Database Applications Program Analyst or Designer
- Graphics Specialist
- Programmer or Administrator
- Programming Team Member, Specializing in Design, Testing, or Documentation
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Features

The University supports Computer Science with a variety of resources. Smart classrooms are equipped with at least one computer and projector. Several instructional classrooms also have student computers. Students may use computers in open-access labs; there is wireless access. Lab and classroom computers may be equipped with a variety of operating systems. Student dorm rooms are equipped high-speed Internet access.

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Preparation

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Major Requirements (B.S.)

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All Computer Science majors must complete each of the following courses in sections I, II, and III with a grade of "C" or better.

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Five courses are required:

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- MATH 1305 - Calculus II *Units: 4*
- MATH 2101 - Elements of Linear Algebra *Units: 4*

- MATH 2150 - Discrete Structures *Units: 4*

Choice of:

- STAT 3401 - Introduction to Probability Theory I *Units: 4*
- STAT 3502 - Statistical Inference I *Units: 4*
- STAT 3601 - Statistics and Probability for Science and Engineering I *Units: 4*
or crosslisted ENGR 3601; STAT 3601 is recommended.

Note:

A student who has recently taken a pre-calculus course in high school should be prepared to begin the calculus sequence. A student with three years of high school mathematics, including two years of algebra and one year of geometry, should be prepared to take MATH 1130, or possibly MATH 1300. Students who are unsure about what mathematics course to take should call the department office for advice.

It should be noted that students may not enroll in any baccalaureate level mathematics or computer science class unless they have met the Entry Level Mathematics (ELM) requirement or are exempt from it. Information about the ELM is available from the Testing Office at (510) 885-3661.

II. Lower Division Computer Science (16 units)

Required courses:

- CS 1160 - Introduction to Computer Science I *Units: 4*
- CS 2360 - Introduction to Computer Science II *Units: 4*
- CS 2370 - Introduction to Computer Science III *Units: 4*
- CS 2430 - Computer Organization and Assembly Language Programming *Units: 4*

Note:

Although CS 1160 is the required introductory course for Computer Science majors, it may be difficult for students with no experience using computers. Students who do not know how to use a word processor or who have no knowledge of computer files and operating systems should consider taking CS 1020 (Introduction to Computers) before taking CS 1160.

Students who have completed a multi-quarter course in C, C++, Java, or Pascal at another college should consult the Mathematics/Computer Science Department; they may be able to substitute their previous coursework for CS 1160 and possibly CS 2360 and 2370.

III. Upper Division Computer Science: Required Courses (20 units)

- CS 3120 - Programming Language Concepts *Units: 4*
- CS 3240 - Data Structures and Algorithms *Units: 4*
- CS 3340 - Introduction to Object-Oriented Programming and Design *Units: 4*
- CS 3430 - Computer Architecture *Units: 4*
- CS 4560 - Operating Systems *Units: 4*

IV. Upper Division Computer Science: Concentration (16 units)

The selection of all elective Computer Science courses is important in giving the major a coherence, with depth in key areas. These electives must be chosen with the assistance and approval of a faculty advisor.

A student must take four of the following eight courses:

- CS 3560 - Introduction to Systems Programming *Units: 4*
- CS 3590 - Data Communications and Networking *Units: 4*

- CS 4660 - Database Architecture *Units: 4*
- CS 4110 - Compiler Design *Units: 4*
- CS 4170 - Theory of Automata *Units: 4*
- CS 4245 - Analysis of Algorithms *Units: 4*
- CS 4310 - Software Engineering I *Units: 4*
- MATH 3750 - Numerical Analysis I *Units: 4*
or
- CS 3750 - Numerical Analysis I *Units: 4*

V. Electives (12 units)

Any of the following courses may be used in meeting this requirement. However, at least 4 units (other than units from CS 3898) must be from courses with the CS prefix.

A. Any course(s):

from IV not used in meeting the requirements in that category.

B. Any upper division course in Computer Science except:

those used in meeting requirements III or IV. No more than 4 units of CS 4900, Independent Study, and no more than 4 units of CS 3898, Cooperative Education, may be applied to the Computer Science major requirements.

C. Any graduate course in:

Computer Science (except CS 6000 and CS 6909).

D. Any upper division course in:

the Department of Mathematics and Computer Science or the Department of Statistics that is applicable to the BS degree major in Mathematics.

E. Any courses from the following list:

- CMPE 3010 - Electric Circuit Theory II *Units: 4*
- PHIL 3002 - Modern Logic *Units: 4*
- PHYS 3280 - Electronics *Units: 4*

Note:

The student is responsible for meeting all prerequisites for any of these courses. The courses in (E) have prerequisites that are not included among major requirements.

Note:

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Options

The major with one of the following three options consists of 92 units. In addition to the 20 units of mathematics courses (Section I), the 16 units of lower division computer science courses (Section II), and the 20 units of upper division computer science courses (Section III) required for a B.S.

degree major in computer science, students choosing an option in Computer Engineering, Networking and Data Communications, or Software Engineering must complete an additional 36 units. See below.

Networking and Data Communications Option (36 units)

Data communication and networking comprise an important, broad subfield of computer science. The Networking and Data Communications Option provides a concentration in the study of electronic networks. It emphasizes the analysis, design, and management of software that controls electronic networks. This option will enhance students' chances for immediate employment in the area while also preparing them for a flexible long-term career.

a. Upper Division Computer Science: Concentration (16 units)

- CS 3560 - Introduction to Systems Programming *Units: 4*

Choice of three courses from the following:

- CS 4660 - Database Architecture *Units: 4*
- CS 4110 - Compiler Design *Units: 4*
- CS 4170 - Theory of Automata *Units: 4*
- CS 4245 - Analysis of Algorithms *Units: 4*
- CS 4310 - Software Engineering I *Units: 4*

- MATH 3750 - Numerical Analysis I *Units: 4*
- or*
- CS 3750 - Numerical Analysis I *Units: 4*

b. Networking Concentration (8 units)

- CS 3590 - Data Communications and Networking *Units: 4*
- CS 4590 - Computer Networks *Units: 4*

c. Networking and Data Communication Electives (12 units)

Three courses chosen from:

- CS 3520 - Web Site Development *Units: 4*
- CS 4525 - Principles of Network Security *Units: 4*
- CS 4592 - Network Operations and Administration *Units: 4*
- CS 4594 - Broadband Networks and Communications *Units: 4*
- CS 4596 - Wireless and Mobile Networking *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Computer Science, Software Engineering Option, B.S.

Program Description

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or crosslisted ENGR 3601; STAT 3601 is recommended.

Note:

A student who has recently taken a pre-calculus course in high school should be prepared to begin the calculus sequence. A student with three years of high school mathematics, including two years of algebra and one year of geometry, should be prepared to take MATH 1130, or possibly MATH 1300. Students who are unsure about what mathematics course to take should call the department office for advice.

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II. Lower Division Computer Science (16 units)

Required courses:

- CS 1160 - Introduction to Computer Science I *Units: 4*
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Students who have completed a multi-quarter course in C, C++, Java, or Pascal at another college should consult the Mathematics/Computer Science Department; they may be able to substitute their previous coursework for CS 1160 and possibly CS 2360 and 2370.

III. Upper Division Computer Science: Required Courses (20 units)

- CS 3120 - Programming Language Concepts *Units: 4*
- CS 3240 - Data Structures and Algorithms *Units: 4*
- CS 3340 - Introduction to Object-Oriented Programming and Design *Units: 4*
- CS 3430 - Computer Architecture *Units: 4*
- CS 4560 - Operating Systems *Units: 4*

IV. Upper Division Computer Science: Concentration (16 units)

The selection of all elective Computer Science courses is important in giving the major a coherence, with depth in key areas. These electives must be chosen with the assistance and approval of a faculty advisor.

A student must take four of the following eight courses:

- CS 3560 - Introduction to Systems Programming *Units: 4*
- CS 3590 - Data Communications and Networking *Units: 4*
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- CS 4110 - Compiler Design *Units: 4*
- CS 4170 - Theory of Automata *Units: 4*
- CS 4245 - Analysis of Algorithms *Units: 4*
- CS 4310 - Software Engineering I *Units: 4*
- MATH 3750 - Numerical Analysis I *Units: 4*
or
- CS 3750 - Numerical Analysis I *Units: 4*

V. Electives (12 units)

Any of the following courses may be used in meeting this requirement. However, at least 4 units (other than units from CS 3898) must be from courses with the CS prefix.

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The major with one of the following three options consists of 92 units. In addition to the 20 units of mathematics courses (Section I), the 16 units of lower division computer science courses (Section II), and the 20 units of upper division computer science courses (Section III) required for a B.S. degree major in computer science, students choosing an option in Computer Engineering, Networking and Data Communications, or Software Engineering must complete an additional 36 units. See below.

Software Engineering Option (36 units)

Software engineering is an important subfield of computer science and is an area of intense activity, both in research and in applications. The Software Engineering Option emphasizes code development as an engineering science and gives students the understanding and skills necessary to participate in the systematic analysis and development of large, real-world software projects.

a. Upper Division Computer Science: Concentration (16 units)

Choice of four courses from the following:

- CS 3560 - Introduction to Systems Programming *Units: 4* (if not used in category (c))
 - CS 3590 - Data Communications and Networking *Units: 4*
 - CS 4110 - Compiler Design *Units: 4*
 - CS 4170 - Theory of Automata *Units: 4*
 - CS 4245 - Analysis of Algorithms *Units: 4*
- MATH 3750 - Numerical Analysis I *Units: 4*
or

- CS 3750 - Numerical Analysis I *Units: 4*

b. Software Engineering Concentration (12 units)

- CS 4310 - Software Engineering I *Units: 4*
- CS 4311 - Software Engineering II *Units: 4*
- CS 4320 - Software Testing and Quality Assurance *Units: 4*

c. Software Engineering Electives (8 units)

Choice of two courses from the following:

- CS 3520 - Web Site Development *Units: 4*
- CS 3560 - Introduction to Systems Programming *Units: 4*
- CS 4110 - Compiler Design *Units: 4*
- CS 4330 - Building Secure Software *Units: 4*
- CS 4660 - Database Architecture *Units: 4*
- CS 4835 - Human-Computer Interaction *Units: 4*
- CS 4840 - Computer Graphics *Units: 4*
- CS 4865 - Graphical User Interface Programming Using a Rapid Application Development Tool *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Construction Management, B.S.

Program Description

The Department of Engineering offers a Bachelor of Science degree in Construction Management designed for individuals who are planning to advance their knowledge and careers for managing construction projects.

The goals of the B.S. in Construction Management are to prepare effective managers for public and private construction projects, to prepare the workforce required for the state's transportation infrastructure improvements, and to enable high school graduates, transfer students and working professionals to assume leadership roles in the construction industry. Students will take required courses in computer aided construction design, construction material and methods, legal and environmental issues in construction, project planning and control, project management, soil mechanics and cost estimating. Issues in construction safety, building codes, electrical and mechanical systems and cost accounting are also covered. Students will also have a broad choice of electives from courses in construction management, engineering, or business to personalize their expertise.

Mission Statement

The mission of the Bachelor of Science degree in Construction Management is to prepare effective managers to lead public and private construction projects, prepare a technically capable management workforce required for the state's transportation infrastructure improvement projects, and enable high school graduates, transfer students and working professionals to assume leadership roles in construction industry.

Student Learning Outcomes

Students graduating with a B.S. in Construction Management from Cal State East Bay will be able to:

1. have knowledge in the core construction management areas (construction materials and methods, safety, codes, scheduling, commissioning, planning and control, project management, construction law, cost accounting, human resources management, environmental and safety issues in construction),
2. have knowledge in broad areas of construction management beyond the core areas,
3. communicate effectively,
4. function in teams,
5. have the knowledge of sustainable building and construction techniques and relevant state regulations,
6. have an awareness of the complex environment (involving professional and ethical responsibilities) in which they will practice their profession,
7. educate themselves and be prepared for lifelong learning and professional development, and
8. have experience in solving real life problems.

Career Opportunities

With the expected increase in large construction work in part stemming from the increase in public spending on California's transportation infrastructure improvement, there is considerable demand for individuals who can technically and scientifically manage construction projects. The construction industry as a whole is one of the largest industries in the nation with a great need for skilled project managers. Sample jobs are construction manager, site manager and others.

Features

The B.S. in Construction Management is designed to accommodate full time students as well as working students. The majority of faculty have significant construction management work experience. Students will have the opportunity to take elective courses in engineering, business, or science to broaden their skills.

Admission

The B.S. in Construction Management is open to individuals planning a career or advancing their career in the construction industry and who meet general university requirements for freshmen or transfer students (see Admission/Undergraduate chapter of the catalog).

Degree Requirements

The major consists of 128 units; the B.S. in Construction Management requires the completion of 180 quarter units distributed among required courses and electives.

Sample Program

A *Sample Program* for this degree can be found at the department website: <http://www20.csueastbay.edu/csci/departments/engineering/index.html>.

Degree Requirements

The major consists of 128 units; the B.S. in Construction Management requires the completion of 180 quarter units distributed among required courses and electives.

Sample Program

A Sample Program for this degree can be found at the department website: www20.csueastbay.edu/csci/departments/engineering/index.html.

I. Lower Division Courses (48 Units)

- ACCT 2251 - Introduction to Financial Accounting *Units: 4*

- CHEM 1100 - Introduction to College Chemistry *Units: 5*
- CMGT 1011 - Introduction to Construction Management *Units: 4*
- CMGT 2011 - Surveying and Blueprint Reading *Units: 4*
- CMGT 2060 - Construction Methods and Material I *Units: 4*
- CMGT 2070 - Construction Methods and Material II *Units: 4*
- ECON 2301 - Principles of Microeconomics *Units: 4*
- ENGR 1420 - Engineering Graphics *Units: 2*
- MATH 1304 - Calculus I *Units: 4*
- PHYS 2701 - Introductory Physics: Force, Mass and Motion *Units: 4*
- PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*
- PSYC 1000 - General Psychology *Units: 5*

II. Upper Division Courses (72 units)

- CMGT 3101 - Statics *Units: 4*
- CMGT 3250 - Electrical and Mechanical Systems in Construction *Units: 4*
- CMGT 3280 - Construction Law *Units: 4*
- CMGT 3400 - Construction Project Management and Commissioning *Units: 4*
- CMGT 3450 - Building Codes *Units: 4*
- CMGT 3600 - Soil Mechanics and Building Foundations *Units: 4*
- CMGT 4100 - Engineering Graphics for Construction Management *Units: 4*
- CMGT 4200 - Construction Scheduling *Units: 4*
- CMGT 4300 - Environmental Issues and Green Building *Units: 4*
- CMGT 4400 - Construction Cost Estimating *Units: 4*
- CMGT 4500 - Construction Project Planning and Control, Computer Tools *Units: 4*
- CMGT 4610 - Senior Project I *Units: 4*
- CMGT 4620 - Senior Project II *Units: 4*
- CMGT 4800 - Construction Safety *Units: 4*
- INDE 3140 - Engineering Economy *Units: 4*
- MGMT 3610 - Strategic Human Resources Management *Units: 4*
- MGMT 3600 - Theories of Management *Units: 4*
- STAT 3031 - Statistical Methods in Biology *Units: 4*

III. Electives Courses (8 Units)

Eight (8) quarter units from the following courses or other 3000 or 4000 level courses with department approval.

- ACCT 2253 - Introduction to Managerial Accounting *Units: 4*
- ACCT 2701 - Legal Environment of Business *Units: 4*
- ACCT 3210 - Cash Management *Units: 4*
- ACCT 3230 - Cost Management *Units: 4*
- FIN 3300 - Financial Management *Units: 4*
- FIN 4410 - Real Estate Finance and Investment *Units: 4*
- FIN 4415 - Real Estate Valuation *Units: 4*
- MGMT 3100 - Decision Science *Units: 4*
- MGMT 3645 - Global Supply Chain Management *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S.

Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Criminal Justice Administration, Community Alternatives and Corrections Option, B.S.

Program Description

The Department of Criminal Justice Administration offers an undergraduate program designed for the development of knowledge and understanding of practices, theory, and concepts of justice administration, as well as to prepare students for professional careers in justice administration, law enforcement, corrections, victim advocacy, law, and community-based programs. The major includes two specialized options and the student selects one depending on her/his career interest.

The Justice and Enforcement option affords the opportunity to work in government agencies and private organizations offering challenging positions in crime prevention, control, and investigation. It is designed for students interested in careers with federal, state, and local law enforcement agencies, or in law enforcement within the private sector. Employment opportunities include administrators of institutional programs, consultants to groups in mobilizing resources to combat social problems, and social scientists working toward understanding individual and group behavior and social control by means of law.

The Community Alternatives and Corrections option is designed for students interested in careers in probation, parole, correctional institutions, and affiliated forms of work. It primarily focuses on probation-related services including investigation of case histories, assessment of treatment needs, advisement to the court, and the operation of diverse types of correctional and community-based programs.

Many local, state, federal and private agencies employ Cal State East Bay criminal justice graduates. Senior majors may qualify for internship placement in criminal justice agencies throughout the Bay Area.

Local level agencies include municipal police departments, county sheriffs' offices, probation departments, halfway and pre-release houses, group homes, crisis centers, juvenile halls, welfare fraud units, computer crime analysis, and retail and industrial security agencies. State level agencies include: the Highway Patrol, California Department of Corrections and Rehabilitation, Department of Motor Vehicles, and Departments of Justice, Fish and Game, and Forestry. Federal level agencies include the Border Patrol; F.B.I.; Secret Service; Bureau of Alcohol, Tobacco and Firearms; Internal Revenue Service; National Park Service; Customs; Postal Inspection Service; and Federal Prisons.

Student Learning Outcomes

Students graduating with a B.S. in Criminal Justice Administration from Cal State East Bay will be able to:

1. Analyze and discuss issues of crime and justice from different perspectives that reflect critical and independent thinking;
2. Communicate, present, and discuss ideas and issues in one-on-one or group settings (Oral Communication), and write effectively, following appropriate writing styles as commonly practiced in the social sciences;
3. Apply knowledge of diversity and multicultural competencies to criminal justice strategies that will promote equity and social justice in every community;
4. Work collaboratively and respectfully as members and leaders of diverse teams and communities;
5. Demonstrate an understanding of how the ethical and responsible application of criminal justice regulates human conduct and sustains stability in society; and
6. Apply appropriate knowledge and skills necessary for a vital career in criminal justice and related professions.

Career Opportunities

- Family Violence, Crisis, or Shelter Counselor
- Community Agency Counselor
- Community Service Coordinator
- Consumer Affairs Director
- Probation, Parole, and Corrections Officer
- Deputy Insurance Commissioner
- Equal Opportunity Representative
- ATF, CIA FBI Agent

- Group Worker
- Insurance Investigator
- Investigator
- Loss Prevention Specialist
- Park Ranger
- Police Administrator
- Police Officer
- Security Manager
- Social Worker
- Vocational Rehabilitation Officer

Preparation

It is strongly recommended that students complete the lower division (1000-2000) courses before taking the upper division courses.

Major Requirements (B.S.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 78 units; the B.S. degree requires a total of 180 units. **Credit/No Credit (CR/NC) grading is not permitted for classes used to meet the major requirements. A grade of C (2.0) or higher is required for all courses to be counted toward the major.**

I. Lower Division (34 units)

- CRJA 2100 - Elementary Criminal Law *Units: 4*
- CRJA 2200 - Basic Criminal Investigation *Units: 4*
- CRJA 2400 - Evidence in Corrections and Law Enforcement *Units: 4*
- CRJA 2500 - Administration of Justice *Units: 4*
- CRJA 2600 - Police Community Relations *Units: 4*
- PSYC 1000 - General Psychology *Units: 5*
- SOC 1000 - Introduction to Sociology *Units: 4*
- STAT 1000 - Elements of Probability and Statistics *Units: 5*

II. Upper Division Core (16 units)

- CRJA 3200 - Research Methods in Criminal Justice *Units: 4*
- CRJA 3700 - Ethics and Justice Administration *Units: 4*
- CRJA 4127 - Crime Theory *Units: 4*
- POSC 3410 - Law and Society *Units: 4*
- or*
- CRJA 4770 - Criminal Law and the Courts *Units: 4*

III. Options (28 units)

Students select one option to complete. In addition to the 16 units of option core courses, 12 units of electives must be taken.

Community Alternatives and Corrections Option (16 units)

Under this option, students must complete a total of 12 additional upper division units from a specialized elective area.

Option Core:

Students who elect to take this option must complete each of the following four courses:

- CRJA 3100 - Corrections and Criminal Justice *Units: 4*
- CRJA 4123 - The Crime Victim *Units: 4*
- CRJA 4700 - Community Based Corrections *Units: 4*
- CRJA 4730 - Restorative Justice *Units: 4*

Specialized Electives (12 units)

Both options' students must choose 12 units of elective coursework from the list below, provided that the course(s) chosen have not previously been taken as part of an option. Upon faculty advisement and approval, additional courses may also apply.

- CRJA 3100 - Corrections and Criminal Justice *Units: 4*
- CRJA 3300 - Crime Prevention and Control *Units: 4*
- CRJA 3400 - Advanced Criminal Investigation *Units: 4*
- CRJA 3350 - Crime and Criminal Justice in the Media and Cinema *Units: 4*
- CRJA 3500 - Criminal Identification *Units: 4*
- CRJA 3610 - Police Organization and Management *Units: 4*
- CRJA 3750 - Family Violence and the Criminal Justice System *Units: 4*
- CRJA 3800 - Comparative Evidence and Its Evaluation *Units: 4*
- CRJA 3999 - Issues in Criminal Justice *Units: 4*
- CRJA 4123 - The Crime Victim *Units: 4*
- CRJA 4124 - Sex Crime Investigation *Units: 4*
- CRJA 4125 - Women in Criminal Justice *Units: 4*
- CRJA 4128 - Internship in Criminal Justice *Units: 4*
- CRJA 4330 - Prejudice, Violence, and Hate Crimes *Units: 4*
- CRJA 4530 - Youth Crime & Empowerment: Experiential Learning *Units: 4*
- CRJA 4700 - Community Based Corrections *Units: 4*
- CRJA 4710 - Drugs, Law, and Society: Race, Gender and U.S. Drug Policy *Units: 4*
- CRJA 4730 - Restorative Justice *Units: 4*
- CRJA 4770 - Criminal Law and the Courts *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Criminal Justice Administration, Justice and Enforcement Option, B.S.

Program Description

The Department of Criminal Justice Administration offers an undergraduate program designed for the development of knowledge and understanding of practices, theory, and concepts of justice administration, as well as to prepare students for professional careers in justice administration, law enforcement, corrections, victim advocacy, law, and community-based programs. The major includes two specialized options and the student selects one depending on her/his career interest.

The Justice and Enforcement option affords the opportunity to work in government agencies and private organizations offering challenging positions in crime prevention, control, and investigation. It is designed for students interested in careers with federal, state, and local law enforcement agencies, or in law enforcement within the private sector. Employment opportunities include administrators of institutional programs, consultants to groups in mobilizing resources to combat social problems, and social scientists working toward understanding individual and group behavior and social control by means of law.

The Community Alternatives and Corrections option is designed for students interested in careers in probation, parole, correctional institutions, and affiliated forms of work. It primarily focuses on probation-related services including investigation of case histories, assessment of treatment needs, advisement to the court, and the operation of diverse types of correctional and community-based programs.

Many local, state, federal and private agencies employ Cal State East Bay criminal justice graduates. Senior majors may qualify for internship placement in criminal justice agencies throughout the Bay Area.

Local level agencies include municipal police departments, county sheriffs' offices, probation departments, halfway and pre-release houses, group homes, crisis centers, juvenile halls, welfare fraud units, computer crime analysis, and retail and industrial security agencies. State level agencies include: the Highway Patrol, California Department of Corrections and Rehabilitation, Department of Motor Vehicles, and Departments of Justice, Fish and Game, and Forestry. Federal level agencies include the Border Patrol; F.B.I.; Secret Service; Bureau of Alcohol, Tobacco and Firearms; Internal Revenue Service; National Park Service; Customs; Postal Inspection Service; and Federal Prisons.

Student Learning Outcomes

Students graduating with a B.S. in Criminal Justice Administration from Cal State East Bay will be able to:

1. Analyze and discuss issues of crime and justice from different perspectives that reflect critical and independent thinking;
2. Communicate, present, and discuss ideas and issues in one-on-one or group settings (Oral Communication), and write effectively, following appropriate writing styles as commonly practiced in the social sciences;
3. Apply knowledge of diversity and multicultural competencies to criminal justice strategies that will promote equity and social justice in every community;
4. Work collaboratively and respectfully as members and leaders of diverse teams and communities;
5. Demonstrate an understanding of how the ethical and responsible application of criminal justice regulates human conduct and sustains stability in society; and
6. Apply appropriate knowledge and skills necessary for a vital career in criminal justice and related professions.

Career Opportunities

- Family Violence, Crisis, or Shelter Counselor
- Community Agency Counselor
- Community Service Coordinator
- Consumer Affairs Director
- Probation, Parole, and Corrections Officer
- Deputy Insurance Commissioner
- Equal Opportunity Representative
- ATF, CIA FBI Agent
- Group Worker
- Insurance Investigator
- Investigator
- Loss Prevention Specialist
- Park Ranger
- Police Administrator
- Police Officer
- Security Manager
- Social Worker
- Vocational Rehabilitation Officer

Preparation

It is strongly recommended that students complete the lower division (1000-2000) courses before taking the upper division courses.

Major Requirements (B.S.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 78 units; the B.S. degree requires a total of 180 units. **Credit/No Credit (CR/NC) grading is not permitted for classes used to meet the major requirements. A grade of C (2.0) or higher is required for all courses to be counted toward the major.**

I. Lower Division (34 units)

- CRJA 2100 - Elementary Criminal Law *Units: 4*
- CRJA 2200 - Basic Criminal Investigation *Units: 4*
- CRJA 2400 - Evidence in Corrections and Law Enforcement *Units: 4*
- CRJA 2500 - Administration of Justice *Units: 4*
- CRJA 2600 - Police Community Relations *Units: 4*
- PSYC 1000 - General Psychology *Units: 5*
- SOC 1000 - Introduction to Sociology *Units: 4*
- STAT 1000 - Elements of Probability and Statistics *Units: 5*

II. Upper Division Core (16 units)

- CRJA 3200 - Research Methods in Criminal Justice *Units: 4*
- CRJA 3700 - Ethics and Justice Administration *Units: 4*
- CRJA 4127 - Crime Theory *Units: 4*

- POSC 3410 - Law and Society *Units: 4*
- or*
- CRJA 4770 - Criminal Law and the Courts *Units: 4*

III. Options (28 units)

Students select one option to complete. In addition to the 16 units of option core courses, 12 units of electives must be taken.

Justice and Enforcement Option (16 units)

Under this option, students must complete a total of 12 additional upper division units from the specialized elective area.

Option Core:

Students who elect to take this option must complete each of the following four courses:

- CRJA 3300 - Crime Prevention and Control *Units: 4*
- CRJA 3400 - Advanced Criminal Investigation *Units: 4*
- CRJA 3610 - Police Organization and Management *Units: 4*
- CRJA 3800 - Comparative Evidence and Its Evaluation *Units: 4*

Specialized Electives (12 units)

Both options' students must choose 12 units of elective coursework from the list below, provided that the course(s) chosen have not previously been taken as part of an option. Upon faculty advisement and approval, additional courses may also apply.

- CRJA 3100 - Corrections and Criminal Justice *Units: 4*
- CRJA 3300 - Crime Prevention and Control *Units: 4*
- CRJA 3400 - Advanced Criminal Investigation *Units: 4*
- CRJA 3350 - Crime and Criminal Justice in the Media and Cinema *Units: 4*
- CRJA 3500 - Criminal Identification *Units: 4*

- CRJA 3610 - Police Organization and Management *Units: 4*
- CRJA 3750 - Family Violence and the Criminal Justice System *Units: 4*
- CRJA 3800 - Comparative Evidence and Its Evaluation *Units: 4*
- CRJA 3999 - Issues in Criminal Justice *Units: 4*
- CRJA 4123 - The Crime Victim *Units: 4*
- CRJA 4124 - Sex Crime Investigation *Units: 4*
- CRJA 4125 - Women in Criminal Justice *Units: 4*
- CRJA 4128 - Internship in Criminal Justice *Units: 4*
- CRJA 4330 - Prejudice, Violence, and Hate Crimes *Units: 4*
- CRJA 4530 - Youth Crime & Empowerment: Experiential Learning *Units: 4*
- CRJA 4700 - Community Based Corrections *Units: 4*
- CRJA 4710 - Drugs, Law, and Society: Race, Gender and U.S. Drug Policy *Units: 4*
- CRJA 4730 - Restorative Justice *Units: 4*
- CRJA 4770 - Criminal Law and the Courts *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Economics, General Economics Option, B.A.

Program Description

The Economics major prepares the student for a broad variety of careers including those in law, journalism, banking and insurance, government, teaching, and research. The study of economics has become essential in today's dynamic and complex business environment. An Economics education provides the student with a logical way of approaching various problems and issues and provides quantitative skills valued highly by employers. The student learns techniques for analyzing contemporary economic problems and develops the ability to exercise sound judgment in evaluating public policy issues. Many of these skills are useful in daily decision-making irrespective of career choice. The broad background developed with the Economics major encourages the student to become an interested, understanding observer of the events of today's and tomorrow's world.

Student Learning Outcomes

Students graduating with a B.A. in Economics from Cal State East Bay will be able to:

1. Recognize and recall microeconomic principles.
2. Recognize and recall macroeconomic principles.
3. Demonstrate effective oral communication skills in presenting coherent, logical economic arguments grounded in economic theory.
4. Demonstrate effective written communication skills in presenting coherent, logical economic arguments grounded in economic theory and methods in writing.
5. Employ mathematics and statistics to solve economic problems.

Career Opportunities

- Accountant
- Analyst
- Business Executive
- Economist
- Employment Researcher/Planner

- Financial Consultant
- Foreign Service Officer
- Financial Analyst
- Management Analyst
- Market Research Analyst
- Policy Analyst
- Professor/Teacher
- Public Policy Analyst
- Securities Analyst
- Statistical Analyst
- Statistician
- Stockbroker

Preparation

For Advanced Placement course equivalencies, see Registration chapter

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 62-98 units; the B.A. degree requires a total of 180 units. Students receiving a B.A. degree major in Economics from this university may, but are not required to, complete one of the following three options: Accounting, Social Science Economics, or Statistical Economics.

Expiration of Courses: Major/option requirement courses will expire ten years after completion of the quarter in which they are earned. Expired courses cannot be used to fulfill degree requirements and must be replaced by current credits. Requests for waivers of the ten-year limit for extenuating circumstances, other than mere failure to register, are made to the department chair in which the course resides and the director of undergraduate programs.

Transfer of courses: Upper division courses will only be considered for equivalency or transfer credit if they are from AACSB accredited institutions. Exceptions will be made for programs that have current and signed agreements with the College of Business and Economics.

Because all upper division Economics courses contain a writing component, it is strongly recommended that students complete their University Writing Skills Requirement as soon as possible after completing 90 quarter units. Students are encouraged to improve these skills by taking MKTG 3495 (Business Communication). See the Business Administration chapter in the undergraduate section of this catalog for a course description.

Economics Major (65 units)

Lower Division Core (17 units)

- ECON 2301 - Principles of Microeconomics *Units: 4*
- ECON 2302 - Principles of Macroeconomics *Units: 4*
- MATH 1810 - Mathematics for Business and Social Sciences *Units: 4*
or MATH 1304 Calculus I
- STAT 2010 - Elements of Statistics for Business and Economics *Units: 5*
or STAT 1000 Elements of Probability and Statistics

Note:

Note: Majors are strongly encouraged to take MATH 1304 rather than MATH 1810. Students considering graduate school in economics require considerably more mathematics than MATH 1304 and should consult with the Economics Department Chair as early as possible regarding which courses to take.

Upper Division Core (16 units)

Complete the following courses as soon as possible after the lower division core has been satisfied.

- ECON 3000 - Micro-Economic Theory *Units: 4*
- ECON 3001 - Micro-Economic Theory II *Units: 4*
- ECON 3005 - Macro-Economic Theory *Units: 4 (Students planning to take the Social Science Economics Option may substitute ECON 3006, Macro-Economics for Business, which is also 4 units)*
- ECON 3310 - Money, Banking, and Financial Intermediaries *Units: 4*

General Economics Option (32 units)

The General Economics Option is the more rigorous of the two options and is strongly recommended, because it requires econometrics (which is one of the most useful courses in the major for equipping students with the data analysis skills valued by employers).

Required course (4 units)

- ECON 4400 - Introduction to Econometrics *Units: 4*

Electives (28 units)

Select seven upper division economics courses, excluding: ECON 3551, ECON 3898, ECON 4900.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Economics, Social Science Economics Option, B.A.

Program Description

The Economics major prepares the student for a broad variety of careers including those in law, journalism, banking and insurance, government, teaching, and research. The study of economics has become essential in today's dynamic and complex business environment. An Economics education provides the student with a logical way of approaching various problems and issues and provides quantitative skills valued highly by employers. The student learns techniques for analyzing contemporary economic problems and develops the ability to exercise sound judgment in evaluating public policy issues. Many of these skills are useful in daily decision-making irrespective of career choice. The broad background developed with the Economics major encourages the student to become an interested, understanding observer of the events of today's and tomorrow's world.

Student Learning Outcomes

Students graduating with a B.A. in Economics from Cal State East Bay will be able to:

1. Recognize and recall microeconomic principles.
2. Recognize and recall macroeconomic principles.
3. Demonstrate effective oral communication skills in presenting coherent, logical economic arguments grounded in economic theory.
4. Demonstrate effective written communication skills in presenting coherent, logical economic arguments grounded in economic theory and methods in writing.
5. Employ mathematics and statistics to solve economic problems.

Career Opportunities

- Accountant
- Analyst
- Business Executive
- Economist
- Employment Researcher/Planner
- Financial Consultant
- Foreign Service Officer
- Financial Analyst
- Management Analyst
- Market Research Analyst
- Policy Analyst
- Professor/Teacher
- Public Policy Analyst
- Securities Analyst
- Statistical Analyst
- Statistician
- Stockbroker

Preparation

For Advanced Placement course equivalencies, see Registration chapter

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 62-98 units; the B.A. degree requires a total of 180 units. Students receiving a B.A. degree major in Economics from this university may, but are not required to, complete one of the following three options: Accounting, Social Science Economics, or Statistical Economics.

Expiration of Courses: Major/option requirement courses will expire ten years after completion of the quarter in which they are earned. Expired courses cannot be used to fulfill degree requirements and must be replaced by current credits. Requests for waivers of the ten-year limit for extenuating circumstances, other than mere failure to register, are made to the department chair in which the course resides and the director of undergraduate programs.

Transfer of courses: Upper division courses will only be considered for equivalency or transfer credit if they are from AACSB accredited institutions. Exceptions will be made for programs that have current and signed agreements with the College of Business and Economics.

Because all upper division Economics courses contain a writing component, it is strongly recommended that students complete their University Writing Skills Requirement as soon as possible after completing 90 quarter units. Students are encouraged to improve these skills by taking MKTG 3495 (Business Communication). See the Business Administration chapter in the undergraduate section of this catalog for a course description.

Economics Major (65 units)

Lower Division Core (17 units)

- ECON 2301 - Principles of Microeconomics *Units: 4*
- ECON 2302 - Principles of Macroeconomics *Units: 4*
- MATH 1810 - Mathematics for Business and Social Sciences *Units: 4*
or MATH 1304 Calculus I
- STAT 2010 - Elements of Statistics for Business and Economics *Units: 5*
or STAT 1000 Elements of Probability and Statistics

Note:

Note: Majors are strongly encouraged to take MATH 1304 rather than MATH 1810. Students considering graduate school in economics require considerably more mathematics than MATH 1304 and should consult with the Economics Department Chair as early as possible regarding which courses to take.

Upper Division Core (16 units)

Complete the following courses as soon as possible after the lower division core has been satisfied.

- ECON 3000 - Micro-Economic Theory *Units: 4*
- ECON 3001 - Micro-Economic Theory II *Units: 4*
- ECON 3005 - Macro-Economic Theory *Units: 4* (*Students planning to take the Social Science Economics Option may substitute ECON 3006, Macro-Economics for Business, which is also 4 units*)
- ECON 3310 - Money, Banking, and Financial Intermediaries *Units: 4*

Social Science Economics Option (32 units)

The Social Science Economics option provides an avenue for students interested in the social science aspects of economics and provides a rigorous and well-rounded economics program that emphasizes its social science underpinnings.

Select five upper division economics courses (20 units):

(excluding: ECON 3551, ECON 3898, ECON 4900)

Select two courses from the following list (8 units):

- HIST 3224 - The Cold War *Units: 4*
- HIST 3305 - Modern South Asia *Units: 4*
- HIST 3345 - The Modern Middle East *Units: 4*
- HIST 3416 - The Great Depression and World War II *Units: 4*
- HIST 3417 - Cold War America *Units: 4*
- HIST 3550 - The History of U.S. Foreign Relations *Units: 4*
- HIST 3605 - Modern Latin America *Units: 4*
- POSC 3120 - State and Local Politics and Government *Units: 4*
- POSC 3130 - Urban Politics *Units: 4*
- POSC 3418 U.S. Immigration Policy and Law
- POSC 3419 - Labor Policy and Law *Units: 4*
- POSC 3460 - Environmental Law *Units: 4*
- POSC 3470 - International Law *Units: 4*
- POSC 3500 - World Problems and Global Response *Units: 4*
- POSC 3505 - American Foreign Policy *Units: 4*
- POSC 3520 - International Relations *Units: 4*
- POSC 3521 - Politics of the Global Economy *Units: 4*
- POSC 3704 - Marxism in Theory and Practice *Units: 4*
- POSC 3800 - Public Policy Analysis *Units: 4*
- SOC 3200 - Social Demography *Units: 4*
- SOC 3420 - Social Inequality *Units: 4*
- SOC 3431 - Seminar in World Development *Units: 4*
- SOC 3880 - Work and Professions *Units: 4*
- SOC 3890 - Sociology of Organizations *Units: 4*
- SOC 4450 - Urban Sociology *Units: 4*
- SOC 4720 - Medical Sociology *Units: 4*

Select one course from the following (4 units):

- HIST 3017 - The Twentieth Century *Units: 4*
- POSC 3300 - Voting and Public Opinion *Units: 4*
- SOC 3000 - Introduction to Sociological Research *Units: 4*

Note:

Students completing a double major in Economics and Business Administration may substitute ECON 3551 for ECON 3000.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

English, Creative Writing Option, B.A.

Program Description

Contrary to popular opinion, most students who major in English do not become public school teachers, although many do choose a career in teaching. Rather, English majors go into all areas of business and government and wherever else the ability to read and write the English language effectively leads to opportunities for advancement and success. The English major is a widely recognized and respected preparation for graduate degrees in law, medicine, social services, and business. It also provides an excellent foundation for free-lance and broadcast journalism. The academic backgrounds of management personnel in private and public organizations attest to how appropriate the English major is for those who pursue careers in management and administration.

Student Learning Outcomes

Students graduating with a B.A. in English from Cal State East Bay will be able to:

1. analyze and interpret various kinds of texts;
2. express their understandings and interpretations in clear and cogent prose;
3. discuss at least one theoretical perspective about language and/or literature
4. demonstrate knowledge of key English language texts in their options: Literature, Creative Writing, Language and Discourse, and Interdisciplinary Language, Literature, and Writing Studies;
5. demonstrate facility with conducting research in traditional/nontraditional ways, including library research, the Internet, and data collection and analysis.

Career Opportunities

Advertising Copy Writer
Author/Critic
Bookstore Manager
Continuity Editor
Corporate Communications Director
Foreign Service Officer
Freelance Journalist/Writer
Greeting Card Editor/Writer
Lawyer
Librarian
Media Specialist

Newspaper Reporter
Public Information Officer
Publication Editor
Publicity Director
Publishing Agent
Radio/TV Agent
Script Writer
Teacher/Professor
Technical Writer

Preparation

For Advanced Placement course equivalencies, see Registration.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 72-84 units; the B.A. degree requires a total of 180 units.

I. Core Curriculum (40 units)

(While ENGL 1001 and ENGL 1002 are not listed as core requirements in the major, they are prerequisites for core classes and campus graduation requirements.)

- ENGL 3010 - Modern English Grammar *Units: 4*
- ENGL 3020 - Advanced Expository Writing *Units: 4*
- ENGL 3080 - Introduction to Critical Theory of Literature *Units: 4*
- ENGL 4251 - Shakespeare *Units: 4*
- ENGL 4890 - Senior Seminar in English *Units: 4*
- ONE upper division English course in British or American literature before 1900 *Units: 4*
- ONE upper division English course in Ethnic-American or Global literatures after 1900 *Units: 4*
- ONE English lower- or upper-division Elective (excluding ENGL 1001, 1002 , 3000, 3001, 3003) *Units: 4*

TWO of the following three introductory courses (8 units)

- ENGL 2030 - Introduction to Critical Writing on Prose Fiction *Units: 4*
- ENGL 2040 - Introduction to Critical Writing on Poetry *Units: 4*
- ENGL 2050 - Introduction to Critical Writing on Drama *Units: 4*

II. Courses in Supporting Fields (0-12 units)

Majors must complete, with grades of C-/CR or better, one year of a college-level foreign language or must pass a translation test administered by the English Department.

III. Options (32 units)

The Department of English offers several options for degree candidates. Choose one of the following:

A. Literature,

B. Creative Writing,

C. Language and Discourse, and

D. Interdisciplinary Language, Literature, and Writing Studies.

Creative Writing (32 units)

- ENGL 2070 - Beginning Workshop in Fiction *Units: 4*
- ENGL 2075 - Beginning Workshop in Poetry *Units: 4*

- ENGL 3070 - Intermediate Workshop in Fiction *Units: 4*
or
- ENGL 4075 - Advanced Workshop in Poetry *Units: 4*

- ENGL 3070 - Intermediate Workshop in Fiction (a second time if chosen above) *Units: 4*
or
- ENGL 3071 - Writing Women's Lives: A Workshop *Units: 4*
or
- ENGL 4075 - Advanced Workshop in Poetry (a second time if chosen above) *Units: 4*

- ENGL 4070 - Advanced Workshop in Fiction *Units: 4*
or
- ENGL 4075 - Advanced Workshop in Poetry (a second time if chosen above) *Units: 4*

- TWO upper division English courses in literature, language, or writing *Units: 8*
- ONE upper division English course in the literature of the 20th or 21st centuries *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

English, Interdisciplinary Language, Literature, and Writing Studies Option, B.A.

Program Description

Contrary to popular opinion, most students who major in English do not become public school teachers, although many do choose a career in teaching. Rather, English majors go into all areas of business and government and wherever else the ability to read and write the English language effectively leads to opportunities for advancement and success. The English major is a widely recognized and respected preparation for graduate degrees in law, medicine, social services, and business. It also provides an excellent foundation for free-lance and broadcast journalism. The academic backgrounds of management personnel in private and public organizations attest to how appropriate the English major is for those who pursue careers in management and administration.

Student Learning Outcomes

Students graduating with a B.A. in English from Cal State East Bay will be able to:

1. analyze and interpret various kinds of texts;
2. express their understandings and interpretations in clear and cogent prose;
3. discuss at least one theoretical perspective about language and/or literature
4. demonstrate knowledge of key English language texts in their options: Literature, Creative Writing, Language and Discourse, and Interdisciplinary Language, Literature, and Writing Studies;
5. demonstrate facility with conducting research in traditional/nontraditional ways, including library research, the Internet, and data collection and analysis.

Career Opportunities

Advertising Copy Writer
Author/Critic
Bookstore Manager
Continuity Editor
Corporate Communications Director
Foreign Service Officer
Freelance Journalist/Writer
Greeting Card Editor/Writer
Lawyer
Librarian
Media Specialist
Newspaper Reporter
Public Information Officer
Publication Editor
Publicity Director
Publishing Agent
Radio/TV Agent
Script Writer
Teacher/Professor
Technical Writer

Preparation

For Advanced Placement course equivalencies, see Registration.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 72-84 units; the B.A. degree requires a total of 180 units.

I. Core Curriculum (40 units)

(While ENGL 1001 and ENGL 1002 are not listed as core requirements in the major, they are prerequisites for core classes and campus graduation requirements.)

- ENGL 3010 - Modern English Grammar *Units: 4*
- ENGL 3020 - Advanced Expository Writing *Units: 4*
- ENGL 3080 - Introduction to Critical Theory of Literature *Units: 4*
- ENGL 4251 - Shakespeare *Units: 4*
- ENGL 4890 - Senior Seminar in English *Units: 4*
- ONE upper division English course in British or American literature before 1900 *Units: 4*
- ONE upper division English course in Ethnic-American or Global literatures after 1900 *Units: 4*
- ONE English lower- or upper-division Elective (excluding ENGL 1001, 1002, 3000, 3001, 3003) *Units: 4*

TWO of the following three introductory courses (8 units)

- ENGL 2030 - Introduction to Critical Writing on Prose Fiction *Units: 4*
- ENGL 2040 - Introduction to Critical Writing on Poetry *Units: 4*
- ENGL 2050 - Introduction to Critical Writing on Drama *Units: 4*

II. Courses in Supporting Fields (0-12 units)

Majors must complete, with grades of C-/CR or better, one year of a college-level foreign language or must pass a translation test administered by the English Department.

III. Options (32 units)

The Department of English offers several options for degree candidates. Choose one of the following:

- A. Literature,
- B. Creative Writing,
- C. Language and Discourse, and
- D. Interdisciplinary Language, Literature, and Writing Studies.

Interdisciplinary Language, Literature, and Writing Studies (32 units)

In formal consultation with two professors—one from the English Department and one from a department other than English—and with the approval of the Chair of the English department, students may propose a program of 32 upper division units in literature, language, rhetoric, or writing drawn from various departments in the university. At least 16 of these units must be in English.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

English, Language and Discourse Option, B.A.

Program Description

Contrary to popular opinion, most students who major in English do not become public school teachers, although many do choose a career in teaching. Rather, English majors go into all areas of business and government and wherever else the ability to read and write the English language effectively leads to opportunities for advancement and success. The English major is a widely recognized and respected preparation for graduate degrees in law, medicine, social services, and business. It also provides an excellent foundation for free-lance and broadcast journalism. The academic backgrounds of management personnel in private and public organizations attest to how appropriate the English major is for those who pursue careers in management and administration.

Student Learning Outcomes

Students graduating with a B.A. in English from Cal State East Bay will be able to:

1. analyze and interpret various kinds of texts;
2. express their understandings and interpretations in clear and cogent prose;
3. discuss at least one theoretical perspective about language and/or literature
4. demonstrate knowledge of key English language texts in their options: Literature, Creative Writing, Language and Discourse, and Interdisciplinary Language, Literature, and Writing Studies;
5. demonstrate facility with conducting research in traditional/nontraditional ways, including library research, the Internet, and data collection and analysis.

Career Opportunities

Advertising Copy Writer
Author/Critic
Bookstore Manager
Continuity Editor
Corporate Communications Director
Foreign Service Officer
Freelance Journalist/Writer
Greeting Card Editor/Writer
Lawyer
Librarian
Media Specialist
Newspaper Reporter
Public Information Officer
Publication Editor
Publicity Director
Publishing Agent
Radio/TV Agent
Script Writer
Teacher/Professor
Technical Writer

Preparation

For Advanced Placement course equivalencies, see Registration.

Program Description

Contrary to popular opinion, most students who major in English do not become public school teachers, although many do choose a career in teaching. Rather, English majors go into all areas of business and government and wherever else the ability to read and write the English language effectively leads to opportunities for advancement and success. The English major is a widely recognized and respected preparation for graduate degrees in law, medicine, social services, and business. It also provides an excellent foundation for free-lance and broadcast journalism. The academic backgrounds of management personnel in private and public organizations attest to how appropriate the English major is for those who pursue careers in management and administration.

Student Learning Outcomes

Students graduating with a B.A. in English from Cal State East Bay will be able to:

1. analyze and interpret various kinds of texts;
2. express their understandings and interpretations in clear and cogent prose;
3. discuss at least one theoretical perspective about language and/or literature
4. demonstrate knowledge of key English language texts in their options: Literature, Creative Writing, Language and Discourse, and Interdisciplinary Language, Literature, and Writing Studies;
5. demonstrate facility with conducting research in traditional/nontraditional ways, including library research, the Internet, and data collection and analysis.

Career Opportunities

Advertising Copy Writer
Author/Critic
Bookstore Manager
Continuity Editor
Corporate Communications Director
Foreign Service Officer
Freelance Journalist/Writer
Greeting Card Editor/Writer
Lawyer

Librarian
Media Specialist
Newspaper Reporter
Public Information Officer
Publication Editor
Publicity Director
Publishing Agent
Radio/TV Agent
Script Writer
Teacher/Professor
Technical Writer

Preparation

For Advanced Placement course equivalencies, see Registration.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 72-84 units; the B.A. degree requires a total of 180 units.

I. Core Curriculum (40 units)

(While ENGL 1001 and ENGL 1002 are not listed as core requirements in the major, they are prerequisites for core classes and campus graduation requirements.)

- ENGL 3010 - Modern English Grammar *Units: 4*
- ENGL 3020 - Advanced Expository Writing *Units: 4*
- ENGL 3080 - Introduction to Critical Theory of Literature *Units: 4*
- ENGL 4251 - Shakespeare *Units: 4*
- ENGL 4890 - Senior Seminar in English *Units: 4*
- ONE upper division English course in British or American literature before 1900 *Units: 4*
- ONE upper division English course in Ethnic-American or Global literatures after 1900 *Units: 4*
- ONE English lower- or upper-division Elective (excluding ENGL 1001, 1002 , 3000, 3001, 3003) *Units: 4*

TWO of the following three introductory courses (8 units)

- ENGL 2030 - Introduction to Critical Writing on Prose Fiction *Units: 4*
- ENGL 2040 - Introduction to Critical Writing on Poetry *Units: 4*
- ENGL 2050 - Introduction to Critical Writing on Drama *Units: 4*

II. Courses in Supporting Fields (0-12 units)

Majors must complete, with grades of C-/CR or better, one year of a college-level foreign language or must pass a translation test administered by the English Department.

III. Options (32 units)

The Department of English offers several options for degree candidates. Choose one of the following:

A. Literature,

B. Creative Writing,

C. Language and Discourse, and

D. Interdisciplinary Language, Literature, and Writing Studies.

Language and Discourse (32 units)

- ENGL 3005 - Study of Language *Units: 4*
or
- ENGL 3010 - Modern English Grammar *Units: 4* (whichever one was not chosen for Core Curriculum above)
- ENGL 3015 - Introduction to Phonology *Units: 4*
- ENGL 3040 - Linguistic History of the English Language *Units: 4*
- ENGL 4010 - Current Theories in Formal Grammar *Units: 4*
- ENGL 4040 - Language in the U.S.A. *Units: 4*
- ONE upper division course covering a single aspect (or a group of closely related aspects) of the English language, with consent of an English advisor *Units: 4*

TWO upper division English electives:

Courses in language and discourse from departments other than English may be used for this option, with the approval of the Chair of the English department.

excluding

- ENGL 3000 - Writing for Proficiency *Units: 4*
- ENGL 3001 - Writing for Proficiency for Non-Native Speakers of English *Units: 4*
- ENGL 3003 - Discursive Writing *Units: 4*

Especially relevant here are courses such as:

- ANTH 3800 - Language and Culture *Units: 4*
- ANTH 3801 - Language in the Modern World *Units: 4*
- PSYC 4740 - Psycholinguistics *Units: 4*
- PHIL 3322 - Philosophy of Language *Units: 4*
- and COMM courses in rhetoric and communication theory

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

English, Literature Option, B.A.

Program Description

Contrary to popular opinion, most students who major in English do not become public school teachers, although many do choose a career in teaching. Rather, English majors go into all areas of business and government and wherever else the ability to read and write the English language effectively leads to opportunities for advancement and success. The English major is a widely recognized and respected preparation for graduate degrees in law, medicine, social services, and business. It also provides an excellent foundation for free-lance and broadcast journalism. The

academic backgrounds of management personnel in private and public organizations attest to how appropriate the English major is for those who pursue careers in management and administration.

Student Learning Outcomes

Students graduating with a B.A. in English from Cal State East Bay will be able to:

1. analyze and interpret various kinds of texts;
2. express their understandings and interpretations in clear and cogent prose;
3. discuss at least one theoretical perspective about language and/or literature
4. demonstrate knowledge of key English language texts in their options: Literature, Creative Writing, Language and Discourse, and Interdisciplinary Language, Literature, and Writing Studies;
5. demonstrate facility with conducting research in traditional/nontraditional ways, including library research, the Internet, and data collection and analysis.

Career Opportunities

Advertising Copy Writer
Author/Critic
Bookstore Manager
Continuity Editor
Corporate Communications Director
Foreign Service Officer
Freelance Journalist/Writer
Greeting Card Editor/Writer
Lawyer
Librarian
Media Specialist
Newspaper Reporter
Public Information Officer
Publication Editor
Publicity Director
Publishing Agent
Radio/TV Agent
Script Writer
Teacher/Professor
Technical Writer

Preparation

For Advanced Placement course equivalencies, see Registration.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 72-84 units; the B.A. degree requires a total of 180 units.

I. Core Curriculum (40 units)

(While ENGL 1001 and ENGL 1002 are not listed as core requirements in the major, they are prerequisites for core classes and campus graduation requirements.)

- ENGL 3010 - Modern English Grammar *Units: 4*
- ENGL 3020 - Advanced Expository Writing *Units: 4*
- ENGL 3080 - Introduction to Critical Theory of Literature *Units: 4*

- ENGL 4251 - Shakespeare *Units: 4*
- ENGL 4890 - Senior Seminar in English *Units: 4*
- ONE upper division English course in British or American literature before 1900 *Units: 4*
- ONE upper division English course in Ethnic-American or Global literatures after 1900 *Units: 4*
- ONE English lower- or upper-division Elective (excluding ENGL 1001, 1002 , 3000, 3001, 3003) *Units: 4*

TWO of the following three introductory courses (8 units)

- ENGL 2030 - Introduction to Critical Writing on Prose Fiction *Units: 4*
- ENGL 2040 - Introduction to Critical Writing on Poetry *Units: 4*
- ENGL 2050 - Introduction to Critical Writing on Drama *Units: 4*

II. Courses in Supporting Fields (0-12 units)

Majors must complete, with grades of C-/CR or better, one year of a college-level foreign language or must pass a translation test administered by the English Department.

III. Options (32 units)

The Department of English offers several options for degree candidates. Choose one of the following:

- A. Literature,
- B. Creative Writing,
- C. Language and Discourse, and
- D. Interdisciplinary Language, Literature, and Writing Studies.

Literature (32 units)

- ENGL 4151 - Introduction to Chaucer *Units: 4*
or
- ENGL 4260 - Milton *Units: 4*
- THREE upper-division English courses in literature of the 18th and/or 19th centuries (at least one British and at least one American) *Units: 12*
- TWO upper-division English courses in literature of the 20th and/or 21st centuries *Units: 8*
- ONE upper-division English course in Women's or Gay and Lesbian literature *Units: 4*
- ONE upper-division course in Global literatures *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Environmental Science, Environmental Systems and Resource Management Option, B.S.

Program Description

Environmental scientists study and analyze the physical and biotic components of the environment; determine the impact of humans on ecosystems; develop strategies and plans to mitigate negative natural and human impacts; protect human and natural environments, and restore natural systems. The Environmental Science program provides interdisciplinary scientific preparation for students wishing to pursue knowledge and employment in the fields of environmental research, consulting, and oversight. Additional objectives of the program include provision of sufficient preparation for graduate studies in environmental sciences and allied fields and partial satisfaction of the Single Subject Matter Preparation Program for a teaching credential in science. The Bachelor of Science degree major in Environmental Science is an interdisciplinary program of study in the Department of Earth and Environmental Sciences with faculty participation from the Department of Biological Sciences (Undergraduate), Department of Chemistry and Biochemistry (Undergraduate), and Department of Anthropology, Geography and Environmental Studies (Undergraduate). In contrast to the B.A. degree major in Environmental Studies, the B.S. degree major in Environmental Science requires students to take a structured core of science courses from a variety of physical and life science disciplines, as well as a specialized upper division option in life science, physical science or environmental systems and resource management.

Student Learning Outcomes

Students graduating with a B.S. in Environmental Science from Cal State East Bay will be able to:

apply knowledge of the principles of form, function and organization of organisms at the levels of molecules, cells, tissues, organs, organisms, populations, and communities;

apply knowledge of the fundamental principles of chemistry, chemical structure, bonding, equilibrium, dynamics, and reactions, as well as classes of organic compounds and reactions;

characterize the nature and distribution of earth materials, the processes by which the materials are formed and altered, and the nature and development of the landscape;

synthesize knowledge of the major components of the physical environment, including landforms, climate, vegetation, and soils;

critically analyze environmental issues through the evaluation of scientific literature, and present their positions clearly and persuasively in written and oral form.

Career Opportunities

Air Quality Controller

Atmospheric Scientist

Biological Consultant

Bioremediation Consultant

Chemical Consultant

Ecosystem and Habitat Restoration

Environmental Consultant

Environmental Field or Lab Technician

Environmental Health Scientist

Environmental Manager

Environmental Policy Developer

Environmental Protection and Regulation Manager

Geochemist

Hazardous Waste Manager

Industrial Hygienist

Pollution Control Technician

Risk Manager

Soils Scientist

Solid Waste Manager

Technical Writer

Urban Planner

Waste Water Treatment Manager

Water Manager

Wildlife Manager

Advanced Placement

Students who earn a grade of 3 or higher on the College Entrance Examination Board's Advanced Placement Test in Environmental Science will be given 4 units of credit equivalent to ENSC 2800.

Major Requirements (B.S.)

It is important to consult an advisor in your major program for clarification and interpretation of your major requirements. The major in Environmental Science consists of 105-114 units; the B.S. degree requires a total of 180 units.

I. Course Prerequisites and Other Admission Requirements

Students entering the Environmental Science program as first year students are expected to have the same high school preparatory courses as other science majors. Admission to the degree program is open to all students admitted to Cal State East Bay. Transfer students may have lower division course deficiencies that must be completed after entry to the program. Continuation in the program is contingent on satisfactory progress in the university as described in the catalog. *Note: Students must meet with an Environmental Science advisor to discuss prerequisites and updates to course offerings.*

II. Lower Division Core (52-61 units)

- ENSC 2400 - Environmental Biology *Units: 4* and ENSC 2401 Environmental Biology Laboratory *Units: 1*
or
- BIOL 1402 - Plant Biology *Units: 5* and BIOL 1403 Animal Biology *Units: 5* (Students choosing the Life Science option must complete BIOL 1402 and BIOL 1403)
- CHEM 1101 - General Chemistry *Units: 5*
- CHEM 1102 - General Chemistry *Units: 5*
- CHEM 1103 - General Chemistry *Units: 5*
- ENSC 2800 - Environmental Problems of California *Units: 4*
- ENSC 2900 - Field Activity in Environmental Science *Units: 3*
- GEOL 2101 - Physical Geology *Units: 5* and GEOL 2102 Earth and Life Through Time *Units: 4*
or
- GEOL 2210 - Environmental Geology *Units: 4* (*or crosslisted ENSC 2210*).
and GEOL 2211 Environmental Geology Laboratory *Units: 1* (*or crosslisted ENSC 2211*).
- GEOL 2600 - Introduction to GIS *Units: 4* (*or crosslisted GEOG 2600*).
- MATH 1304 - Calculus I *Units: 4*
- PHYS 2701 - Introductory Physics: Force, Mass and Motion *Units: 4*
- PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*
- PHYS 2703 - Introductory Physics: Light and Modern Physics *Units: 4*

III. Upper Division Core (23 units)

- BIOL 3110 - Principles of Ecology *Units: 4*
- ENSC 3500 - Environmental Hydrology *Units: 4*
or
- GEOL 3500 - Environmental Hydrology *Units: 4*
or
- GEOL 4320 - Hydrogeology *Units: 4*
- ENSC 4800 - Seminar in Environmental Science *Units: 3*
- ENVT 4100 - Environmental Impact Analysis *Units: 4*
- GEOG 3000 - Sustainable Resource Management *Units: 4*
- STAT 3010 - Statistical Methods in the Social Sciences *Units: 4*
or
- STAT 3031 - Statistical Methods in Biology *Units: 4*

IV. Electives (8 units)

Complete one elective from the following:

- ECON 4306 - Environmental Economics *Units: 4*
- GEOG 4330 - Sustainable Development *Units: 4*
- HIST 3505 - California Environmental History *Units: 4*
- PHIL 3151 - Environmental Ethics *Units: 4*
- POSC 3460 - Environmental Law *Units: 4*
- POSC 4171 - Public Policy and the Environment *Units: 4*

Complete one elective from the following:

- ENSC 3999 - Issues in Environmental Science *Units: 4*
- ENSC 4140 - Hazardous Waste Management *Units: 4*
or
- GEOL 4140 - Hazardous Waste Management *Units: 4*
- ENSC 4200 - Global Change *Units: 4*

V. Options

A student must declare an option by the time he/she has completed 44 units of the Core courses. Students may elect to change their option with the notification of their advisor. Options are available in Life Science, Physical Science, and Environmental Systems and Resource Management, and are designed to provide in-depth study of a specific field. Each option requires 22 units within the discipline, in a combination of required courses and electives.

Environmental Systems and Resource Management Option (22 units minimum)

Two or three courses from the following (8-15 units by advisement):

- ENVT 3400 - Environmental Resource Analysis *Units: 4*
- ENVT 4910 - Internship in Environmental Studies *Units: 2-4*

- GEOG 3030 - Fundamentals of Geographic Information Systems *Units: 4*
- GEOG 3410 - Air-Photo Interpretation *Units: 4*
- GEOG 3450 - Literature and Research Methods *Units: 5*
- GEOG 3605 - Computer Cartography *Units: 5*
- GEOG 4425 - Remote Sensing of Earth Environments *Units: 4*
- GEOG 4605 - Applications of GIS *Units: 5*

Two or three courses from the following (7-13 units by advisement):

- BIOL 4130 - Biogeography *Units: 4*
or
- GEOG 4130 - Biogeography *Units: 4*
- ENVT 4800 - Senior Seminar in Environmental Studies *Units: 3*
- ENVT 4320 - Energy and Society *Units: 4*
or
- GEOG 4320 - Energy and Society *Units: 4*
- ENVT 4350 - Water Resources and Management *Units: 4*
or
- GEOG 4350 - Water Resources and Management *Units: 4*
- GEOL 3110 - Principles of Geomorphology *Units: 4*
or
- GEOG 3115 - Physical Landscape Analysis *Units: 4*

One of the following:

- ENVT 4300 - Environmental Field Studies *Units: 5*
- GEOG 4125 - Field Physical-Biotic Geography *Units: 4*
- GEOG 3480 - Applied Field Studies *Units: 4*
- ENVT 3480 - Applied Field Studies *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Environmental Science, Life Science Option, B.S.

Program Description

Environmental scientists study and analyze the physical and biotic components of the environment; determine the impact of humans on ecosystems; develop strategies and plans to mitigate negative natural and human impacts; protect human and natural environments, and restore natural systems. The Environmental Science program provides interdisciplinary scientific preparation for students wishing to pursue knowledge and employment in the fields of environmental research, consulting, and oversight. Additional objectives of the program include provision of sufficient preparation for graduate studies in environmental sciences and allied fields and partial satisfaction of the Single Subject Matter Preparation Program for a teaching credential in science. The Bachelor of Science degree major in Environmental Science is an interdisciplinary program of study in the Department of Earth and Environmental Sciences with faculty participation from the Department of Biological Sciences (Undergraduate), Department of

Chemistry and Biochemistry (Undergraduate), and Department of Anthropology, Geography and Environmental Studies (Undergraduate). In contrast to the B.A. degree major in Environmental Studies, the B.S. degree major in Environmental Science requires students to take a structured core of science courses from a variety of physical and life science disciplines, as well as a specialized upper division option in life science, physical science or environmental systems and resource management.

Student Learning Outcomes

Students graduating with a B.S. in Environmental Science from Cal State East Bay will be able to:

apply knowledge of the principles of form, function and organization of organisms at the levels of molecules, cells, tissues, organs, organisms, populations, and communities;

apply knowledge of the fundamental principles of chemistry, chemical structure, bonding, equilibrium, dynamics, and reactions, as well as classes of organic compounds and reactions;

characterize the nature and distribution of earth materials, the processes by which the materials are formed and altered, and the nature and development of the landscape;

synthesize knowledge of the major components of the physical environment, including landforms, climate, vegetation, and soils;

critically analyze environmental issues through the evaluation of scientific literature, and present their positions clearly and persuasively in written and oral form.

Career Opportunities

Air Quality Controller

Atmospheric Scientist

Biological Consultant

Bioremediation Consultant

Chemical Consultant

Ecosystem and Habitat Restoration

Environmental Consultant

Environmental Field or Lab Technician

Environmental Health Scientist

Environmental Manager

Environmental Policy Developer

Environmental Protection and Regulation Manager

Geochemist

Hazardous Waste Manager

Industrial Hygienist

Pollution Control Technician

Risk Manager

Soils Scientist

Solid Waste Manager

Technical Writer

Urban Planner

Waste Water Treatment Manager

Water Manager

Wildlife Manager

Advanced Placement

Students who earn a grade of 3 or higher on the College Entrance Examination Board's Advanced Placement Test in Environmental Science will be given 4 units of credit equivalent to ENSC 2800.

Major Requirements (B.S.)

It is important to consult an advisor in your major program for clarification and interpretation of your major requirements. The major in Environmental Science consists of 105-114 units; the B.S. degree requires a total of 180 units.

I. Course Prerequisites and Other Admission Requirements

Students entering the Environmental Science program as first year students are expected to have the same high school preparatory courses as other science majors. Admission to the degree program is open to all students admitted to Cal State East Bay. Transfer students may have lower division course deficiencies that must be completed after entry to the program. Continuation in the program is contingent on satisfactory progress in the university as described in the catalog. *Note: Students must meet with an Environmental Science advisor to discuss prerequisites and updates to course offerings.*

II. Lower Division Core (52-61 units)

- ENSC 2400 - Environmental Biology *Units: 4* and ENSC 2401 Environmental Biology Laboratory *Units: 1*
or
- BIOL 1402 - Plant Biology *Units: 5* and BIOL 1403 Animal Biology *Units: 5* (Students choosing the Life Science option must complete BIOL 1402 and BIOL 1403)
- CHEM 1101 - General Chemistry *Units: 5*
- CHEM 1102 - General Chemistry *Units: 5*
- CHEM 1103 - General Chemistry *Units: 5*
- ENSC 2800 - Environmental Problems of California *Units: 4*
- ENSC 2900 - Field Activity in Environmental Science *Units: 3*
- GEOL 2101 - Physical Geology *Units: 5* and GEOL 2102 Earth and Life Through Time *Units: 4*
or
- GEOL 2210 - Environmental Geology *Units: 4* (*or crosslisted ENSC 2210*).
and GEOL 2211 Environmental Geology Laboratory *Units: 1* (*or crosslisted ENSC 2211*).
- GEOL 2600 - Introduction to GIS *Units: 4* (*or crosslisted GEOG 2600*).
- MATH 1304 - Calculus I *Units: 4*
- PHYS 2701 - Introductory Physics: Force, Mass and Motion *Units: 4*
- PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*
- PHYS 2703 - Introductory Physics: Light and Modern Physics *Units: 4*

III. Upper Division Core (23 units)

- BIOL 3110 - Principles of Ecology *Units: 4*
- ENSC 3500 - Environmental Hydrology *Units: 4*

or

- GEOL 3500 - Environmental Hydrology *Units: 4*
- or*
- GEOL 4320 - Hydrogeology *Units: 4*
- ENSC 4800 - Seminar in Environmental Science *Units: 3*
- ENVT 4100 - Environmental Impact Analysis *Units: 4*
- GEOG 3000 - Sustainable Resource Management *Units: 4*
- STAT 3010 - Statistical Methods in the Social Sciences *Units: 4*
- or*
- STAT 3031 - Statistical Methods in Biology *Units: 4*

IV. Electives (8 units)

Complete one elective from the following:

- ECON 4306 - Environmental Economics *Units: 4*
- GEOG 4330 - Sustainable Development *Units: 4*
- HIST 3505 - California Environmental History *Units: 4*
- PHIL 3151 - Environmental Ethics *Units: 4*
- POSC 3460 - Environmental Law *Units: 4*
- POSC 4171 - Public Policy and the Environment *Units: 4*

Complete one elective from the following:

- ENSC 3999 - Issues in Environmental Science *Units: 4*
- ENSC 4140 - Hazardous Waste Management *Units: 4*
- or*
- GEOL 4140 - Hazardous Waste Management *Units: 4*
- ENSC 4200 - Global Change *Units: 4*

V. Options

A student must declare an option by the time he/she has completed 44 units of the Core courses. Students may elect to change their option with the notification of their advisor. Options are available in Life Science, Physical Science, and Environmental Systems and Resource Management, and are designed to provide in-depth study of a specific field. Each option requires 22 units within the discipline, in a combination of required courses and electives.

Life Science Option (22 units)

- BIOL 4351 - Biological Conservation *Units: 4*

Electives from the following courses or other approved courses (18 units by advisement):

- BIOL 3215 - Marine Biology *Units: 4*
- or*
- MSC 4103 - Marine Ecology *Units: 6*
- BIOL 3216 - Freshwater Environments *Units: 4*
- BIOL 3898 - Cooperative Education *Units: 1-4*

- BIOL 4175 - Population Biology *Units: 4*
- BIOL 4340 - Environmental Microbiology *Units: 4*
- BIOL 4516 - Environmental Animal Physiology *Units: 4*
- BIOL 4517 - Environmental Toxicology *Units: 4*
- BIOL 4518 - Animal Behavior *Units: 4*
- BIOL 4583 - Vertebrate Biology *Units: 4*
- MSC 4104 - Quantitative Marine Science *Units: 6*
- MSC 4144 - Biological Oceanography *Units: 6*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Environmental Science, Physical Science Option, B.S.

Program Description

Environmental scientists study and analyze the physical and biotic components of the environment; determine the impact of humans on ecosystems; develop strategies and plans to mitigate negative natural and human impacts; protect human and natural environments, and restore natural systems. The Environmental Science program provides interdisciplinary scientific preparation for students wishing to pursue knowledge and employment in the fields of environmental research, consulting, and oversight. Additional objectives of the program include provision of sufficient preparation for graduate studies in environmental sciences and allied fields and partial satisfaction of the Single Subject Matter Preparation Program for a teaching credential in science. The Bachelor of Science degree major in Environmental Science is an interdisciplinary program of study in the Department of Earth and Environmental Sciences with faculty participation from the Department of Biological Sciences (Undergraduate), Department of Chemistry and Biochemistry (Undergraduate), and Department of Anthropology, Geography and Environmental Studies (Undergraduate). In contrast to the B.A. degree major in Environmental Studies, the B.S. degree major in Environmental Science requires students to take a structured core of science courses from a variety of physical and life science disciplines, as well as a specialized upper division option in life science, physical science or environmental systems and resource management.

Student Learning Outcomes

Students graduating with a B.S. in Environmental Science from Cal State East Bay will be able to:

apply knowledge of the principles of form, function and organization of organisms at the levels of molecules, cells, tissues, organs, organisms, populations, and communities;

apply knowledge of the fundamental principles of chemistry, chemical structure, bonding, equilibrium, dynamics, and reactions, as well as classes of organic compounds and reactions;

characterize the nature and distribution of earth materials, the processes by which the materials are formed and altered, and the nature and development of the landscape;

synthesize knowledge of the major components of the physical environment, including landforms, climate, vegetation, and soils;

critically analyze environmental issues through the evaluation of scientific literature, and present their positions clearly and persuasively in written and oral form.

Career Opportunities

Air Quality Controller

Atmospheric Scientist
Biological Consultant
Bioremediation Consultant
Chemical Consultant
Ecosystem and Habitat Restoration
Environmental Consultant
Environmental Field or Lab Technician
Environmental Health Scientist
Environmental Manager
Environmental Policy Developer
Environmental Protection and Regulation Manager
Geochemist
Hazardous Waste Manager
Industrial Hygienist
Pollution Control Technician
Risk Manager
Soils Scientist
Solid Waste Manager
Technical Writer
Urban Planner
Waste Water Treatment Manager
Water Manager
Wildlife Manager

Advanced Placement

Students who earn a grade of 3 or higher on the College Entrance Examination Board's Advanced Placement Test in Environmental Science will be given 4 units of credit equivalent to ENSC 2800.

Major Requirements (B.S.)

It is important to consult an advisor in your major program for clarification and interpretation of your major requirements. The major in Environmental Science consists of 105-114 units; the B.S. degree requires a total of 180 units.

I. Course Prerequisites and Other Admission Requirements

Students entering the Environmental Science program as first year students are expected to have the same high school preparatory courses as other science majors. Admission to the degree program is open to all students admitted to Cal State East Bay. Transfer students may have lower division course deficiencies that must be completed after entry to the program. Continuation in the program is contingent on satisfactory progress in the

university as described in the catalog. *Note: Students must meet with an Environmental Science advisor to discuss prerequisites and updates to course offerings.*

II. Lower Division Core (52-61 units)

- ENSC 2400 - Environmental Biology *Units: 4* and ENSC 2401 Environmental Biology Laboratory *Units: 1*
or
- BIOL 1402 - Plant Biology *Units: 5* and BIOL 1403 Animal Biology *Units: 5* (Students choosing the Life Science option must complete BIOL 1402 and BIOL 1403)
- CHEM 1101 - General Chemistry *Units: 5*
- CHEM 1102 - General Chemistry *Units: 5*
- CHEM 1103 - General Chemistry *Units: 5*
- ENSC 2800 - Environmental Problems of California *Units: 4*
- ENSC 2900 - Field Activity in Environmental Science *Units: 3*
- GEOL 2101 - Physical Geology *Units: 5* and GEOL 2102 Earth and Life Through Time *Units: 4*
or
- GEOL 2210 - Environmental Geology *Units: 4* (*or* crosslisted ENSC 2210).
and GEOL 2211 Environmental Geology Laboratory *Units: 1* (*or* crosslisted ENSC 2211).
- GEOL 2600 - Introduction to GIS *Units: 4* (*or* crosslisted GEOG 2600).
- MATH 1304 - Calculus I *Units: 4*
- PHYS 2701 - Introductory Physics: Force, Mass and Motion *Units: 4*
- PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*
- PHYS 2703 - Introductory Physics: Light and Modern Physics *Units: 4*

III. Upper Division Core (23 units)

- BIOL 3110 - Principles of Ecology *Units: 4*
- ENSC 3500 - Environmental Hydrology *Units: 4*
or
- GEOL 3500 - Environmental Hydrology *Units: 4*
or
- GEOL 4320 - Hydrogeology *Units: 4*
- ENSC 4800 - Seminar in Environmental Science *Units: 3*
- ENVT 4100 - Environmental Impact Analysis *Units: 4*
- GEOG 3000 - Sustainable Resource Management *Units: 4*
- STAT 3010 - Statistical Methods in the Social Sciences *Units: 4*
or
- STAT 3031 - Statistical Methods in Biology *Units: 4*

IV. Electives (8 units)

Complete one elective from the following:

- ECON 4306 - Environmental Economics *Units: 4*
- GEOG 4330 - Sustainable Development *Units: 4*
- HIST 3505 - California Environmental History *Units: 4*
- PHIL 3151 - Environmental Ethics *Units: 4*
- POSC 3460 - Environmental Law *Units: 4*
- POSC 4171 - Public Policy and the Environment *Units: 4*

Complete one elective from the following:

- ENSC 3999 - Issues in Environmental Science *Units: 4*
- ENSC 4140 - Hazardous Waste Management *Units: 4*
or
- GEOL 4140 - Hazardous Waste Management *Units: 4*
- ENSC 4200 - Global Change *Units: 4*

V. Options

A student must declare an option by the time he/she has completed 44 units of the Core courses. Students may elect to change their option with the notification of their advisor. Options are available in Life Science, Physical Science, and Environmental Systems and Resource Management, and are designed to provide in-depth study of a specific field. Each option requires 22 units within the discipline, in a combination of required courses and electives.

Physical Science Option (22 units)

Electives from the following courses and/or other approved courses (22 units by advisement)

- CHEM 2200 - Quantitative Analysis *Units: 5*
- CHEM 2301 - Survey of Organic Chemistry *Units: 4*
- CHEM 2302 - Survey of Organic Chemistry *Units: 4*
- CHEM 3898 - Cooperative Education *Units: 1-4*
- CHEM 4601 - Environmental Chemistry I *Units: 4*
- CHEM 4602 - Environmental Chemistry II *Units: 4*
- CHEM 4900 - Independent Study *Units: 1-4*
- GEOL 3110 - Principles of Geomorphology *Units: 4*
- GEOL 3601 - Mineralogy and Optical Crystallography *Units: 5*
- GEOL 3701 - Igneous and Metamorphic Petrology *Units: 5*
- GEOL 3801 - Sedimentology and Stratigraphy *Units: 5*
- GEOL 3810 - Structural Geology *Units: 5*
- GEOL 4010 - Applied Geophysics *Units: 5*
- GEOL 4130 - Survey of Geochemistry *Units: 4*
- GEOL 4320 - Hydrogeology *Units: 4*
- MATH 1305 - Calculus II *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Environmental Studies, Environment and Society Option, B.A.

Program Description

The Environmental Studies major is designed to provide an interdisciplinary and multidisciplinary overview of the environmental studies field, coupled with an in-depth study of one subfield. The core requires coursework in the sciences and social sciences and students may build options based on one or several related fields in these categories.

As part of the Environmental Studies major, students must select a 16 unit program of electives. Three options allow students latitude in providing specialization to a particular field of interest: Environment and Society, Physical Environment and Sustainable Resource Management. Courses in these options must be distributed across two departments.

Environmental Studies majors are provided internship and service learning opportunities through assignments in public and private agencies on projects related to citizen action, environmental management and planning, or in research. Ten to twenty hours weekly are required and are supervised and evaluated by agency personnel.

Student Learning Outcomes

Students graduating with a B.A. in Environmental Studies from Cal State East Bay will be able to:

1. demonstrate the knowledge, skills and sensitivities needed to perform effectively as an environmental professional individuals and in a team setting;
2. demonstrate a basic understanding of politics, law, economics, ethics, biology, chemistry, geography and geology as they apply to the environmental studies field;
3. communicate clearly and persuasively concerning a range of environmental issues both orally and in writing and to critically analyze environmental impact reports, statements and assessments;
4. apply scientific reasoning and quantitative and statistical methods applicable in the environmental field;
5. understand the practical/field dimensions of a range of Bay Area environmental issues and their linkages to regional, national and global processes critical to sustainable development;

Career Opportunities

- Administrator
- Citizen Activist
- Consumer Affairs Specialist
- Educator
- Energy Impact Assessor
- Environmental Auditor
- Environmental Compliance Officer
- Historical Preservationist
- Journalist
- Land Acquisition Analyst
- Lawyer Librarian
- Mediator
- Open Space and Recreation Planner
- Solid Waste and Recycling Specialist
- Sustainability Manager
- Water Control Inspector
- Water Conservationist
- Watershed Manager

Scholarship

Richard and Evelyn Thoman Scholarship in Geography and Environmental Studies

One \$500 scholarship awarded each academic year for full-time undergraduate or graduate studies. Awards are limited to students with upper division or graduate standing. A grade point average of 3.5 or higher is required, and demonstrated scholastic and creative ability in the field of Geography or Environmental Studies.

Advanced Placement

Students who earn a grade of 3 or higher on the College Entrance Examination Board's Advanced Placement Test in Environmental Science will be given 4 units of credit equivalent to ENVT 2000.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 92-94 units; the B.A. degree requires a total of 180 units.

I. Lower Division (32-33 units)

- CHEM 1100 - Introduction to College Chemistry *Units: 5*
- ENSC 2400 - Environmental Biology *Units: 4* and ENSC 2401 Environmental Biology Laboratory *Units: 1 (preferred)*
or
- BIOL 1000 - Basic Concepts in Biology *Units: 5*
or
- BIOL 1001 - Introduction to Biology *Units: 4* and BIOL 1002 Introduction to Biology Lab *Units: 1*
- ECON 2301 - Principles of Microeconomics *Units: 4*¹
or crosslisted GEOG 2301
- ENVT 2000 - Introduction to Environmental Studies *Units: 4*
- GEOG 2100 - Physical Geography *Units: 4*
or GEOG 2400 Geography of World Development
- GEOL 2210 - Environmental Geology *Units: 4* and GEOL 2211 Environmental Geology Laboratory *Units: 1 (preferred)*
or
- GEOL 1000 - Earth Systems Science *Units: 5*
or
- GEOL 1001 - Introduction to the Earth Sciences *Units: 4* and GEOL 1002 Earth Sciences Laboratory *Units: 2*
- STAT 1000 - Elements of Probability and Statistics *Units: 5*
or STAT 2010 Elements of Statistics for Business and Economics

Footnote

1. Prerequisite for ECON 4306

II. Upper Division (44-45 units)

- ECON 4306 - Environmental Economics *Units: 4*
or
- PHIL 3151 - Environmental Ethics *Units: 4*
- ENVT 3400 - Environmental Resource Analysis *Units: 4*
- ENVT 4100 - Environmental Impact Analysis *Units: 4*
- ENVT 4800 - Senior Seminar in Environmental Studies *Units: 3*
- GEOG 3000 - Sustainable Resource Management *Units: 4*
- GEOG 3030 - Fundamentals of Geographic Information Systems *Units: 4*
- GEOG 3450 - Literature and Research Methods *Units: 5*
- HIST 3505 - California Environmental History *Units: 4*
- POSC 3460 - Environmental Law *Units: 4*
or
- POSC 4171 - Public Policy and the Environment *Units: 4*

Any two of the following: (8-9)

- ENVT 3480 - Applied Field Studies *Units: 4*
- GEOG 3480 - Applied Field Studies *Units: 4*

- ENVT 4300 - Environmental Field Studies *Units: 5*
- GEOG 4125 - Field Course in Physical-Biotic Geography *Units: 4*

III. Program of Electives (16 units)

Students must select one of the following options. Four courses, totaling 16 units, distributed across at least two catalog prefixes, in one of the following three options:

Environment and Society Option

- ENVT 4320 - Energy and Society *Units: 4*
or
- GEOG 4320 - Energy and Society *Units: 4*
- ENVT 4910 - Internship in Environmental Studies *Units: 2-4*
- ECON 4306 - Environmental Economics *Units: 4 **
- GEOG 4330 - Sustainable Development *Units: 4*
- HSC 2001 - Environmental Factors in Health *Units: 4*
or
- HSC 3200 - Environmental Health *Units: 4*
- INTS 3100 - Global Systems *Units: 4*
- PHIL 3151 - Environmental Ethics *Units: 4*
- PHIL 3511 - Philosophy of Human Rights and Global Justice *Units: 4*
- POSC 3120 - State and Local Politics and Government *Units: 4*
- POSC 3130 - Urban Politics *Units: 4*
- POSC 3800 - Public Policy Analysis *Units: 4*
- POSC 4171 - Public Policy and the Environment *Units: 4 **
- PUAD 4800 - Public Administration and Society *Units: 4*
- REC 4050 - Social Justice in Hospitality, Recreation and Tourism *Units: 4*

Note:

* if not used for upper division core

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Environmental Studies, Physical Environment Option, B.A.

Program Description

The Environmental Studies major is designed to provide an interdisciplinary and multidisciplinary overview of the environmental studies field, coupled with an in-depth study of one subfield. The core requires coursework in the sciences and social sciences and students may build options based on one or several related fields in these categories.

As part of the Environmental Studies major, students must select a 16 unit program of electives. Three options allow students latitude in providing

specialization to a particular field of interest: Environment and Society, Physical Environment and Sustainable Resource Management. Courses in these options must be distributed across two departments.

Environmental Studies majors are provided internship and service learning opportunities through assignments in public and private agencies on projects related to citizen action, environmental management and planning, or in research. Ten to twenty hours weekly are required and are supervised and evaluated by agency personnel.

Student Learning Outcomes

Students graduating with a B.A. in Environmental Studies from Cal State East Bay will be able to:

1. demonstrate the knowledge, skills and sensitivities needed to perform effectively as an environmental professional individuals and in a team setting;
2. demonstrate a basic understanding of politics, law, economics, ethics, biology, chemistry, geography and geology as they apply to the environmental studies field;
3. communicate clearly and persuasively concerning a range of environmental issues both orally and in writing and to critically analyze environmental impact reports, statements and assessments;
4. apply scientific reasoning and quantitative and statistical methods applicable in the environmental field;
5. understand the practical/field dimensions of a range of Bay Area environmental issues and their linkages to regional, national and global processes critical to sustainable development;

Career Opportunities

- Administrator
- Citizen Activist
- Consumer Affairs Specialist
- Educator
- Energy Impact Assessor
- Environmental Auditor
- Environmental Compliance Officer
- Historical Preservationist
- Journalist
- Land Acquisition Analyst
- Lawyer Librarian
- Mediator
- Open Space and Recreation Planner
- Solid Waste and Recycling Specialist
- Sustainability Manager
- Water Control Inspector
- Water Conservationist
- Watershed Manager

Scholarship

Richard and Evelyn Thoman Scholarship in Geography and Environmental Studies

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Advanced Placement

Students who earn a grade of 3 or higher on the College Entrance Examination Board's Advanced Placement Test in Environmental Science will be given 4 units of credit equivalent to ENVT 2000.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 92-94 units; the B.A. degree requires a total of 180 units.

I. Lower Division (32-33 units)

- CHEM 1100 - Introduction to College Chemistry *Units: 5*
- ENSC 2400 - Environmental Biology *Units: 4* and ENSC 2401 Environmental Biology Laboratory *Units: 1 (preferred)*
or
- BIOL 1000 - Basic Concepts in Biology *Units: 5*
or
- BIOL 1001 - Introduction to Biology *Units: 4* and BIOL 1002 Introduction to Biology Lab *Units: 1*
- ECON 2301 - Principles of Microeconomics *Units: 4*¹
or crosslisted GEOG 2301
- ENVT 2000 - Introduction to Environmental Studies *Units: 4*
- GEOG 2100 - Physical Geography *Units: 4*
or GEOG 2400 Geography of World Development
- GEOL 2210 - Environmental Geology *Units: 4* and GEOL 2211 Environmental Geology Laboratory *Units: 1 (preferred)*
or
- GEOL 1000 - Earth Systems Science *Units: 5*
or
- GEOL 1001 - Introduction to the Earth Sciences *Units: 4* and GEOL 1002 Earth Sciences Laboratory *Units: 2*
- STAT 1000 - Elements of Probability and Statistics *Units: 5*
or STAT 2010 Elements of Statistics for Business and Economics

Footnote

1. Prerequisite for ECON 4306

II. Upper Division (44-45 units)

- ECON 4306 - Environmental Economics *Units: 4*
or
- PHIL 3151 - Environmental Ethics *Units: 4*
- ENVT 3400 - Environmental Resource Analysis *Units: 4*
- ENVT 4100 - Environmental Impact Analysis *Units: 4*
- ENVT 4800 - Senior Seminar in Environmental Studies *Units: 3*
- GEOG 3000 - Sustainable Resource Management *Units: 4*
- GEOG 3030 - Fundamentals of Geographic Information Systems *Units: 4*
- GEOG 3450 - Literature and Research Methods *Units: 5*
- HIST 3505 - California Environmental History *Units: 4*
- POSC 3460 - Environmental Law *Units: 4*
or
- POSC 4171 - Public Policy and the Environment *Units: 4*

Any two of the following: (8-9)

- ENVT 3480 - Applied Field Studies *Units: 4*
- GEOG 3480 - Applied Field Studies *Units: 4*

- ENVT 4300 - Environmental Field Studies *Units: 5*
- GEOG 4125 - Field Course in Physical-Biotic Geography *Units: 4*

III. Program of Electives (16 units)

Students must select one of the following options. Four courses, totaling 16 units, distributed across at least two catalog prefixes, in one of the following three options:

Physical Environment Option

- BIOL 4130 - Biogeography *Units: 4*
or
- GEOG 4130 - Biogeography *Units: 4*
- ENSC 3500 - Environmental Hydrology *Units: 4*
- ENVT 4910 - Internship in Environmental Studies *Units: 2-4*
- GEOG 2100 - Physical Geography *Units: 4 **
- GEOG 2410 - Introduction to Maps *Units: 4*
- GEOG 3115 - Physical Landscape Analysis *Units: 4*
- GEOG 3120 - Climate Change *Units: 4*
- GEOG 4125 - Field Course in Physical-Biotic Geography *Units: 4*
- GEOG 4425 - Remote Sensing of Earth Environments *Units: 4*
- GEOL 1201 - Introduction to Oceanography *Units: 4*
- GEOL 1202 - Oceanography Laboratory *Units: 2*
- GEOL 2000 - Introduction to the Geology of California *Units: 4*
- GEOL 2101 - Physical Geology *Units: 5*
- GEOL 2301 - Natural Hazards *Units: 4*
- GEOL 3040 - Weather and the Atmosphere *Units: 4*
- GEOL 3100 - Geology of the Western National Parks *Units: 4*
- GEOL 3110 - Principles of Geomorphology *Units: 4*
- GEOL 3200 - Regional Field Geology *Units: 1-2*
- GEOL 3400 - General Oceanography *Units: 4*
- GEOL 4320 - Hydrogeology *Units: 4*

Note:

* if not used for lower division core

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Environmental Studies, Sustainable Resource Management Option, B.A.

Program Description

The Environmental Studies major is designed to provide an interdisciplinary and multidisciplinary overview of the environmental studies field, coupled with an in-depth study of one subfield. The core requires coursework in the sciences and social sciences and students may build options

based on one or several related fields in these categories.

As part of the Environmental Studies major, students must select a 16 unit program of electives. Three options allow students latitude in providing specialization to a particular field of interest: Environment and Society, Physical Environment and Sustainable Resource Management. Courses in these options must be distributed across two departments.

Environmental Studies majors are provided internship and service learning opportunities through assignments in public and private agencies on projects related to citizen action, environmental management and planning, or in research. Ten to twenty hours weekly are required and are supervised and evaluated by agency personnel.

Student Learning Outcomes

Students graduating with a B.A. in Environmental Studies from Cal State East Bay will be able to:

1. demonstrate the knowledge, skills and sensitivities needed to perform effectively as an environmental professional individuals and in a team setting;
2. demonstrate a basic understanding of politics, law, economics, ethics, biology, chemistry, geography and geology as they apply to the environmental studies field;
3. communicate clearly and persuasively concerning a range of environmental issues both orally and in writing and to critically analyze environmental impact reports, statements and assessments;
4. apply scientific reasoning and quantitative and statistical methods applicable in the environmental field;
5. understand the practical/field dimensions of a range of Bay Area environmental issues and their linkages to regional, national and global processes critical to sustainable development;

Career Opportunities

- Administrator
- Citizen Activist
- Consumer Affairs Specialist
- Educator
- Energy Impact Assessor
- Environmental Auditor
- Environmental Compliance Officer
- Historical Preservationist
- Journalist
- Land Acquisition Analyst
- Lawyer Librarian
- Mediator
- Open Space and Recreation Planner
- Solid Waste and Recycling Specialist
- Sustainability Manager
- Water Control Inspector
- Water Conservationist
- Watershed Manager

Scholarship

Richard and Evelyn Thoman Scholarship in Geography and Environmental Studies

One \$500 scholarship awarded each academic year for full-time undergraduate or graduate studies. Awards are limited to students with upper division or graduate standing. A grade point average of 3.5 or higher is required, and demonstrated scholastic and creative ability in the field of Geography or Environmental Studies.

Advanced Placement

Students who earn a grade of 3 or higher on the College Entrance Examination Board's Advanced Placement Test in Environmental Science will be given 4 units of credit equivalent to ENVT 2000.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 92-94 units; the B.A. degree requires a total of 180 units.

I. Lower Division (32-33 units)

- CHEM 1100 - Introduction to College Chemistry *Units: 5*
- ENSC 2400 - Environmental Biology *Units: 4* and ENSC 2401 Environmental Biology Laboratory *Units: 1 (preferred)*
or
- BIOL 1000 - Basic Concepts in Biology *Units: 5*
or
- BIOL 1001 - Introduction to Biology *Units: 4* and BIOL 1002 Introduction to Biology Lab *Units: 1*
- ECON 2301 - Principles of Microeconomics *Units: 4*¹
or crosslisted GEOG 2301
- ENVT 2000 - Introduction to Environmental Studies *Units: 4*
- GEOG 2100 - Physical Geography *Units: 4*
or GEOG 2400 Geography of World Development
- GEOL 2210 - Environmental Geology *Units: 4* and GEOL 2211 Environmental Geology Laboratory *Units: 1 (preferred)*
or
- GEOL 1000 - Earth Systems Science *Units: 5*
or
- GEOL 1001 - Introduction to the Earth Sciences *Units: 4* and GEOL 1002 Earth Sciences Laboratory *Units: 2*
- STAT 1000 - Elements of Probability and Statistics *Units: 5*
or STAT 2010 Elements of Statistics for Business and Economics

Footnote

1. Prerequisite for ECON 4306

II. Upper Division (44-45 units)

- ECON 4306 - Environmental Economics *Units: 4*
or
- PHIL 3151 - Environmental Ethics *Units: 4*
- ENVT 3400 - Environmental Resource Analysis *Units: 4*
- ENVT 4100 - Environmental Impact Analysis *Units: 4*
- ENVT 4800 - Senior Seminar in Environmental Studies *Units: 3*
- GEOG 3000 - Sustainable Resource Management *Units: 4*
- GEOG 3030 - Fundamentals of Geographic Information Systems *Units: 4*
- GEOG 3450 - Literature and Research Methods *Units: 5*
- HIST 3505 - California Environmental History *Units: 4*
- POSC 3460 - Environmental Law *Units: 4*
or
- POSC 4171 - Public Policy and the Environment *Units: 4*

Any two of the following: (8-9)

- ENVT 3480 - Applied Field Studies *Units: 4*
- GEOG 3480 - Applied Field Studies *Units: 4*

- ENVT 4300 - Environmental Field Studies *Units: 5*
- GEOG 4125 - Field Course in Physical-Biotic Geography *Units: 4*

III. Program of Electives (16 units)

Students must select one of the following options. Four courses, totaling 16 units, distributed across at least two catalog prefixes, in one of the following three options:

Sustainable Resource Management Option

Required courses (8 units):

- ENVT 4320 - Energy and Society *Units: 4*
or
- GEOG 4320 - Energy and Society *Units: 4*
- GEOG 4350 - Water Resources and Management *Units: 4*

Electives (8 units):

- BIOL 3110 - Principles of Ecology *Units: 4*
- ECON 4306 - Environmental Economics *Units: 4**
- ENGR 3110 - Project Management *Units: 4*
or
- MGMT 3110 - Project Management *Units: 4*
- ENSC 3500 - Environmental Hydrology *Units: 4*
- ENSC 4140 - Hazardous Waste Management *Units: 4*
- ENVT 4910 - Internship in Environmental Studies *Units: 2-4*
- GEOG 3410 - Air-Photo Interpretation *Units: 4*
- GEOG 3600 - Cartographic Principles and Graphic Communication *Units: 4*
- GEOG 3605 - Computer Cartography *Units: 5*
- GEOG 4330 - Sustainable Development *Units: 4*
- GEOG 4355 - Watershed Management *Units: 4*
- GEOG 4425 - Remote Sensing of Earth Environments *Units: 4*
- GEOG 4605 - Applications of GIS *Units: 5*
- HOS 4550 - Global Tourism *Units: 4*
- POSC 4445 - Bureaucratic Politics and Administrative Law *Units: 4*
- REC 3305 - Outdoor Living Skills *Units: 4*
or
- REC 4705 - Outdoor Adventure Recreation *Units: 4*

Note:

*if not used for upper-division core

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S.

Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Ethnic Studies, African American Studies Option, B.A.

Program Description

The Department of Ethnic Studies is central to the university's commitment "to educational excellence for a diverse society." It offers a major, minors, and courses that are interdisciplinary in nature and provide a holistic approach to the study of the United States' multiracial, multicultural, and multigender immigrant society. The department's faculty provide areas of study that integrate social science and literary theory, as well as anthropological and sociological concepts within a historical and humanistic perspective. The underlying goal of Ethnic Studies is to provide a better understanding of diversity in American culture and thought.

The Ethnic Studies major consists of a core of Ethnic Studies courses, support courses in other departments in the university, and Options in Ethnic Studies, African American Studies Option, B.A., Ethnic Studies, Asian American Studies Option, B.A., Ethnic Studies, Genders and Sexualities in Communities of Color Option, B.A., Ethnic Studies, Latino/a and Latin American Studies Option, B.A., and Ethnic Studies, American Indian Studies Option, B.A. The curriculum is multidisciplinary as well as interdisciplinary. The major helps the student qualify for graduate work in social sciences, law, and humanities, and for work in municipal, state, and federal government. Of equal importance are the advantages the major provides to work in community service organizations concerned with opportunities and problems of various ethnic and racial groups.

Student Learning Outcomes

Students graduating with a B.A. in Ethnic Studies from Cal State East Bay will be able to:

1. Summarize the legacies of contact, conquest, and resistance to racial oppression in domestic and transnational frames by defining and explaining key concepts such as colonialism, oppression, slavery, genocide, racialization, class, structural racism, sexism, homophobia, anti-racism, solidarity, whiteness, sustainability, and privilege.
2. Understand and apply critical frameworks of Ethnic Studies, including decolonizing methodology, intersectionality, resiliency theory, structural analysis, women of color feminism, and cultural analysis.
3. Recognize and explain the complexity and heterogeneity of racialized groups in the US, including intra-group differences related to gender, class, region, sexuality, generation, immigration status, language fluency and so forth.
4. Identify and critique essentialist paradigms.
5. Participate in community-based or service-learning projects overseen by Ethnic Studies faculty that link the critical frameworks and key concepts of Ethnic Studies with experiential learning.
6. Engage in critical reflection about social justice rooted in community-based experiences

Career Opportunities

- Teacher
- Attorney
- Diversity Specialist
- Journalist
- Public/ International Relations Specialist
- Government Service
- Professor
- Researcher
- Writer

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 60 units; the B.A. degree requires a total of 180 units.

I. Lower Division Core Courses (4 units)

One course selected from the following:

- ES 1001 - Introduction to Ethnic Studies *Units: 4*
- ES 1005 - Viewing Diversity *Units: 4*
- ES 2200 - Introduction to Latino/a and Latin American Studies *Units: 4*
- ES 2400 - Introduction to American Indian Studies *Units: 4*
- ES 2500 - Introduction to Asian American Studies *Units: 4*
- ES 2700 - Introduction to Genders and Sexualities in Communities of Color *Units: 4*

II. Upper Division Core Courses (12 units)

- ES 3000 - Ethnic Writers *Units: 4*
- ES 3110 - Racism in America I *Units: 4*
- ES 3889 - Engaging Communities of Color *Units: 4*

III. Primary Option Courses (20 units)

Choose one of the following options. Choose five courses in the option's area of study in consultation with an advisor. [One course from another department (4 units) can be chosen in consultation with an advisor. The course should be selected from a recommended list of courses that will be kept in the Ethnic Studies department.]

A. African American Studies Option

- ES 1022 - African Americans and Popular Culture *Units: 4*
- ES 2175 - Hip Hop Nation *Units: 4*
- ES 2300 - The Black Cinematic Tradition *Units: 4*
- ES 3105 - African American Identity *Units: 4*
- ES 3120 - The Civil Rights Movement *Units: 4*
- ES 3130 - Slavery in the Americas *Units: 4*
- ES 3140 Racism and Sports *Units: 4*
- ES 3145 African American Music *Units: 4*
- ES 3146 - Jazz on Film *Units: 4*
- ES 3165 - African American Sexuality *Units: 4*
- ES 3190 - Internationalist Worldview of Malcolm X *Units: 4*
- ES 3230 - Oral Traditions *Units: 4*
- ES 3303 - Contemporary African American Women Writers *Units: 4*
- ES 3434 - Mixed Race Identities *Units: 4*
- ES 3700 - Special Topics in Ethnic Studies *Units: 4*
- ES 3720 - James Baldwin *Units: 4*
- ES 3999 - Issues in Ethnic Studies *Units: 4*
- ES 4900 - Independent Study *Units: 4*
- ENGL 3692 - Black Literature II *Units: 4*

- ENGL 3691 - Black Literature I *Units: 4*
or
- ES 3691 - Black Literature I *Units: 4*

- HIST 3567 African American History *Units: 4*
or
- ES 3567 African American History *Units: 4*

- SOC 3415 - Sociology of the African American Family *Units: 4*

IV. Electives (24 Units)

Students may choose any of 6 4-unit courses from any of the options not selected for the primary option in consultation with an advisor..

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Ethnic Studies, American Indian Studies Option, B.A.

Program Description

The Department of Ethnic Studies is central to the university's commitment "to educational excellence for a diverse society." It offers a major, minors, and courses that are interdisciplinary in nature and provide a holistic approach to the study of the United States' multiracial, multicultural, and multigender immigrant society. The department's faculty provide areas of study that integrate social science and literary theory, as well as anthropological and sociological concepts within a historical and humanistic perspective. The underlying goal of Ethnic Studies is to provide a better understanding of diversity in American culture and thought.

The Ethnic Studies major consists of a core of Ethnic Studies courses, support courses in other departments in the university, and Options in Ethnic Studies, African American Studies Option, B.A., Ethnic Studies, Asian American Studies Option, B.A., Ethnic Studies, Genders and Sexualities in Communities of Color Option, B.A., Ethnic Studies, Latino/a and Latin American Studies Option, B.A., and Ethnic Studies, American Indian Studies Option, B.A. The curriculum is multidisciplinary as well as interdisciplinary. The major helps the student qualify for graduate work in social sciences, law, and humanities, and for work in municipal, state, and federal government. Of equal importance are the advantages the major provides to work in community service organizations concerned with opportunities and problems of various ethnic and racial groups.

Student Learning Outcomes

Students graduating with a B.A. in Ethnic Studies from Cal State East Bay will be able to:

1. Summarize the legacies of contact, conquest, and resistance to racial oppression in domestic and transnational frames by defining and explaining key concepts such as colonialism, oppression, slavery, genocide, racialization, class, structural racism, sexism, homophobia, anti-racism, solidarity, whiteness, sustainability, and privilege.
2. Understand and apply critical frameworks of Ethnic Studies, including decolonizing methodology, intersectionality, resiliency theory, structural analysis, women of color feminism, and cultural analysis.
3. Recognize and explain the complexity and heterogeneity of racialized groups in the US, including intra-group differences related to gender, class, region, sexuality, generation, immigration status, language fluency and so forth.
4. Identify and critique essentialist paradigms.
5. Participate in community-based or service-learning projects overseen by Ethnic Studies faculty that link the critical frameworks and key concepts of Ethnic Studies with experiential learning.
6. Engage in critical reflection about social justice rooted in community-based experiences

Career Opportunities

- Teacher
- Attorney
- Diversity Specialist
- Journalist
- Public/ International Relations Specialist
- Government Service
- Professor

- Researcher
- Writer

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 60 units; the B.A. degree requires a total of 180 units.

I. Lower Division Core Courses (4 units)

One course selected from the following:

- ES 1001 - Introduction to Ethnic Studies *Units: 4*
- ES 1005 - Viewing Diversity *Units: 4*
- ES 2200 - Introduction to Latino/a and Latin American Studies *Units: 4*
- ES 2400 - Introduction to American Indian Studies *Units: 4*
- ES 2500 - Introduction to Asian American Studies *Units: 4*
- ES 2700 - Introduction to Genders and Sexualities in Communities of Color *Units: 4*

II. Upper Division Core Courses (12 units)

- ES 3000 - Ethnic Writers *Units: 4*
- ES 3110 - Racism in America I *Units: 4*
- ES 3889 - Engaging Communities of Color *Units: 4*

III. Primary Option Courses (20 units)

Choose one of the following options. Choose five courses in the option's area of study in consultation with an advisor. [One course from another department (4 units) can be chosen in consultation with an advisor. The course should be selected from a recommended list of courses that will be kept in the Ethnic Studies department.]

B. American Indian Studies Option

- ES 2400 - Introduction to American Indian Studies *Units: 4*
- ES 2320 - American Indian Oral Literature *Units: 4*
- ES 3230 - Oral Traditions *Units: 4*
- ES 3305 - Contemporary American Indian Life *Units: 4*
- ES 3310 - God is Red: American Indian World View *Units: 4*
- ES 3330 - American Indian Revitalization Movements *Units: 4*
- ES 3434 - Mixed Race Identities *Units: 4*
- ES 3700 - Special Topics in Ethnic Studies *Units: 4*
- ES 3800 - Peoples of Central America *Units: 4*
- ES 3999 - Issues in Ethnic Studies *Units: 4*
- ES 4900 - Independent Study *Units: 4*
- ANTH 3500 - North American Indians *Units: 4*

IV. Electives (24 Units)

Students may choose any of 6 4-unit courses from any of the options not selected for the primary option in consultation with an advisor..

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Ethnic Studies, Asian American Studies Option, B.A.

Program Description

The Department of Ethnic Studies is central to the university's commitment "to educational excellence for a diverse society." It offers a major, minors, and courses that are interdisciplinary in nature and provide a holistic approach to the study of the United States' multiracial, multicultural, and multigender immigrant society. The department's faculty provide areas of study that integrate social science and literary theory, as well as anthropological and sociological concepts within a historical and humanistic perspective. The underlying goal of Ethnic Studies is to provide a better understanding of diversity in American culture and thought.

The Ethnic Studies major consists of a core of Ethnic Studies courses, support courses in other departments in the university, and Options in Ethnic Studies, African American Studies Option, B.A., Ethnic Studies, Asian American Studies Option, B.A., Ethnic Studies, Genders and Sexualities in Communities of Color Option, B.A., Ethnic Studies, Latino/a and Latin American Studies Option, B.A., and Ethnic Studies, American Indian Studies Option, B.A. The curriculum is multidisciplinary as well as interdisciplinary. The major helps the student qualify for graduate work in social sciences, law, and humanities, and for work in municipal, state, and federal government. Of equal importance are the advantages the major provides to work in community service organizations concerned with opportunities and problems of various ethnic and racial groups.

Student Learning Outcomes

Students graduating with a B.A. in Ethnic Studies from Cal State East Bay will be able to:

1. Summarize the legacies of contact, conquest, and resistance to racial oppression in domestic and transnational frames by defining and explaining key concepts such as colonialism, oppression, slavery, genocide, racialization, class, structural racism, sexism, homophobia, anti-racism, solidarity, whiteness, sustainability, and privilege.
2. Understand and apply critical frameworks of Ethnic Studies, including decolonizing methodology, intersectionality, resiliency theory, structural analysis, women of color feminism, and cultural analysis.
3. Recognize and explain the complexity and heterogeneity of racialized groups in the US, including intra-group differences related to gender, class, region, sexuality, generation, immigration status, language fluency and so forth.
4. Identify and critique essentialist paradigms.
5. Participate in community-based or service-learning projects overseen by Ethnic Studies faculty that link the critical frameworks and key concepts of Ethnic Studies with experiential learning.
6. Engage in critical reflection about social justice rooted in community-based experiences

Career Opportunities

- Teacher
- Attorney
- Diversity Specialist
- Journalist
- Public/ International Relations Specialist
- Government Service
- Professor
- Researcher
- Writer

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 60 units; the B.A. degree requires a total of 180 units.

I. Lower Division Core Courses (4 units)

One course selected from the following:

- ES 1001 - Introduction to Ethnic Studies *Units: 4*
- ES 1005 - Viewing Diversity *Units: 4*
- ES 2200 - Introduction to Latino/a and Latin American Studies *Units: 4*
- ES 2400 - Introduction to American Indian Studies *Units: 4*
- ES 2500 - Introduction to Asian American Studies *Units: 4*
- ES 2700 - Introduction to Genders and Sexualities in Communities of Color *Units: 4*

II. Upper Division Core Courses (12 units)

- ES 3000 - Ethnic Writers *Units: 4*
- ES 3110 - Racism in America I *Units: 4*
- ES 3889 - Engaging Communities of Color *Units: 4*

III. Primary Option Courses (20 units)

Choose one of the following options. Choose five courses in the option's area of study in consultation with an advisor. [One course from another department (4 units) can be chosen in consultation with an advisor. The course should be selected from a recommended list of courses that will be kept in the Ethnic Studies department.]

C. Asian American Studies Option

- ENGL 3670 - Asian/Filipino American Literature *Units: 4*
- ES 2500 - Introduction to Asian American Studies *Units: 4*
- ES 3030 - Immigrant and Refugee Women *Units: 4*
- ES 3434 - Mixed Race Identities *Units: 4*
- ES 3552 - The Chinese Experience in the United States *Units: 4*
- ES 3555 - Asian American Family Patterns *Units: 4*
- ES 3556 - Concentration Camps, U.S.A. *Units: 4*
- ES 3557 - Asian American Film Festival *Units: 4*
- ES 3600 - Presumed Guilty: Asian Americans and the Post-9/11 Racialized State *Units: 4*
- ES 3610 - South Asian American Experience *Units: 4*
- ES 3230 - Oral Traditions *Units: 4*
- ES 3700 - Special Topics in Ethnic Studies *Units: 4*
- ES 3999 - Issues in Ethnic Studies *Units: 4*
- ES 4900 - Independent Study *Units: 4*

IV. Electives (24 Units)

Students may choose any of 6 4-unit courses from any of the options not selected for the primary option in consultation with an advisor..

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Ethnic Studies, Genders and Sexualities in Communities of Color Option, B.A.

Program Description

The Department of Ethnic Studies is central to the university's commitment "to educational excellence for a diverse society." It offers a major, minors, and courses that are interdisciplinary in nature and provide a holistic approach to the study of the United States' multiracial, multicultural, and multigender immigrant society. The department's faculty provide areas of study that integrate social science and literary theory, as well as anthropological and sociological concepts within a historical and humanistic perspective. The underlying goal of Ethnic Studies is to provide a better understanding of diversity in American culture and thought.

The Ethnic Studies major consists of a core of Ethnic Studies courses, support courses in other departments in the university, and Options in Ethnic Studies, African American Studies Option, B.A., Ethnic Studies, Asian American Studies Option, B.A., Ethnic Studies, Genders and Sexualities in Communities of Color Option, B.A., Ethnic Studies, Latino/a and Latin American Studies Option, B.A., and Ethnic Studies, American Indian Studies Option, B.A. The curriculum is multidisciplinary as well as interdisciplinary. The major helps the student qualify for graduate work in social sciences, law, and humanities, and for work in municipal, state, and federal government. Of equal importance are the advantages the major provides to work in community service organizations concerned with opportunities and problems of various ethnic and racial groups.

Student Learning Outcomes

Students graduating with a B.A. in Ethnic Studies from Cal State East Bay will be able to:

1. Summarize the legacies of contact, conquest, and resistance to racial oppression in domestic and transnational frames by defining and explaining key concepts such as colonialism, oppression, slavery, genocide, racialization, class, structural racism, sexism, homophobia, anti-racism, solidarity, whiteness, sustainability, and privilege.
2. Understand and apply critical frameworks of Ethnic Studies, including decolonizing methodology, intersectionality, resiliency theory, structural analysis, women of color feminism, and cultural analysis.
3. Recognize and explain the complexity and heterogeneity of racialized groups in the US, including intra-group differences related to gender, class, region, sexuality, generation, immigration status, language fluency and so forth.
4. Identify and critique essentialist paradigms.
5. Participate in community-based or service-learning projects overseen by Ethnic Studies faculty that link the critical frameworks and key concepts of Ethnic Studies with experiential learning.
6. Engage in critical reflection about social justice rooted in community-based experiences

Career Opportunities

- Teacher
- Attorney
- Diversity Specialist
- Journalist
- Public/ International Relations Specialist
- Government Service
- Professor
- Researcher
- Writer

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 60 units; the B.A. degree requires a total of 180 units.

I. Lower Division Core Courses (4 units)

One course selected from the following:

- ES 1001 - Introduction to Ethnic Studies *Units: 4*
- ES 1005 - Viewing Diversity *Units: 4*
- ES 2200 - Introduction to Latino/a and Latin American Studies *Units: 4*
- ES 2400 - Introduction to American Indian Studies *Units: 4*
- ES 2500 - Introduction to Asian American Studies *Units: 4*
- ES 2700 - Introduction to Genders and Sexualities in Communities of Color *Units: 4*

II. Upper Division Core Courses (12 units)

- ES 3000 - Ethnic Writers *Units: 4*
- ES 3110 - Racism in America I *Units: 4*
- ES 3889 - Engaging Communities of Color *Units: 4*

III. Primary Option Courses (20 units)

Choose one of the following options. Choose five courses in the option's area of study in consultation with an advisor. [One course from another department (4 units) can be chosen in consultation with an advisor. The course should be selected from a recommended list of courses that will be kept in the Ethnic Studies department.]

D. Genders and Sexualities in Communities of Color Option

- ES 3030 - Immigrant and Refugee Women *Units: 4*
or
- WOST 3030 - Immigrant and Refugee Women *Units: 4*
- ES 3165 - African American Sexuality *Units: 4*
- ES 3210 - Latinas in the United States *Units: 4*
- ES 3230 - Oral Traditions *Units: 4*
- ES 3265 - Latino/a Sexualities *Units: 4*
- ES 3303 - Contemporary African American Women Writers *Units: 4*
- ES 3430 - Interracial Sex and Marriage *Units: 4*
- ES 3434 - Mixed Race Identities *Units: 4*
- ES 3700 - Special Topics in Ethnic Studies *Units: 4*
- ES 3710 - Racialized Masculinities *Units: 4*
- ES 3720 - James Baldwin *Units: 4*
- ES 3730 - Women of Color, Genders and Sexualities *Units: 4*
- ES 3999 - Issues in Ethnic Studies *Units: 4*
- ES 4300 - Queer of Color Subjects and Critical Theory *Units: 4*
- ES 4900 - Independent Study *Units: 4*
- WOST 3420 - Minority Women in America *Units: 4*
or
- ES 3420 - Minority Women in America *Units: 4*

IV. Electives (24 Units)

Students may choose any of 6 4-unit courses from any of the options not selected for the primary option in consultation with an advisor..

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second

composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Ethnic Studies, Latino/a and Latin American Studies Option, B.A.

Program Description

The Department of Ethnic Studies is central to the university's commitment "to educational excellence for a diverse society." It offers a major, minors, and courses that are interdisciplinary in nature and provide a holistic approach to the study of the United States' multiracial, multicultural, and multigender immigrant society. The department's faculty provide areas of study that integrate social science and literary theory, as well as anthropological and sociological concepts within a historical and humanistic perspective. The underlying goal of Ethnic Studies is to provide a better understanding of diversity in American culture and thought.

The Ethnic Studies major consists of a core of Ethnic Studies courses, support courses in other departments in the university, and Options in Ethnic Studies, African American Studies Option, B.A., Ethnic Studies, Asian American Studies Option, B.A., Ethnic Studies, Genders and Sexualities in Communities of Color Option, B.A., Ethnic Studies, Latino/a and Latin American Studies Option, B.A., and Ethnic Studies, American Indian Studies Option, B.A. The curriculum is multidisciplinary as well as interdisciplinary. The major helps the student qualify for graduate work in social sciences, law, and humanities, and for work in municipal, state, and federal government. Of equal importance are the advantages the major provides to work in community service organizations concerned with opportunities and problems of various ethnic and racial groups.

Student Learning Outcomes

Students graduating with a B.A. in Ethnic Studies from Cal State East Bay will be able to:

1. Summarize the legacies of contact, conquest, and resistance to racial oppression in domestic and transnational frames by defining and explaining key concepts such as colonialism, oppression, slavery, genocide, racialization, class, structural racism, sexism, homophobia, anti-racism, solidarity, whiteness, sustainability, and privilege.
2. Understand and apply critical frameworks of Ethnic Studies, including decolonizing methodology, intersectionality, resiliency theory, structural analysis, women of color feminism, and cultural analysis.
3. Recognize and explain the complexity and heterogeneity of racialized groups in the US, including intra-group differences related to gender, class, region, sexuality, generation, immigration status, language fluency and so forth.
4. Identify and critique essentialist paradigms.
5. Participate in community-based or service-learning projects overseen by Ethnic Studies faculty that link the critical frameworks and key concepts of Ethnic Studies with experiential learning.
6. Engage in critical reflection about social justice rooted in community-based experiences

Career Opportunities

- Teacher
- Attorney
- Diversity Specialist
- Journalist
- Public/ International Relations Specialist
- Government Service
- Professor
- Researcher
- Writer

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 60 units; the B.A. degree requires a total of 180 units.

I. Lower Division Core Courses (4 units)

One course selected from the following:

- ES 1001 - Introduction to Ethnic Studies *Units: 4*
- ES 1005 - Viewing Diversity *Units: 4*
- ES 2200 - Introduction to Latino/a and Latin American Studies *Units: 4*
- ES 2400 - Introduction to American Indian Studies *Units: 4*
- ES 2500 - Introduction to Asian American Studies *Units: 4*
- ES 2700 - Introduction to Genders and Sexualities in Communities of Color *Units: 4*

II. Upper Division Core Courses (12 units)

- ES 3000 - Ethnic Writers *Units: 4*
- ES 3110 - Racism in America I *Units: 4*
- ES 3889 - Engaging Communities of Color *Units: 4*

III. Primary Option Courses (20 units)

Choose one of the following options. Choose five courses in the option's area of study in consultation with an advisor. [One course from another department (4 units) can be chosen in consultation with an advisor. The course should be selected from a recommended list of courses that will be kept in the Ethnic Studies department.]

E. Latino/a and Latin American Studies Option

- ES 3202 Latino/a Writers *Units: 4*
- ES 3210 - Latinas in the United States *Units: 4*
- ES 3230 - Oral Traditions *Units: 4*
- ES 3243 Latino/a Perspectives in Film *Units: 4*
- ES 3255 - The Chicano Movement *Units: 4*
- ES 3265 - Latino/a Sexualities *Units: 4*
- ES 3434 - Mixed Race Identities *Units: 4*
- ES 3700 - Special Topics in Ethnic Studies *Units: 4*
- ES 3800 - Peoples of Central America *Units: 4*
- ES 3805 - Latin American Immigration *Units: 4*
- ES 3999 - Issues in Ethnic Studies *Units: 4*
- ES 4290 - Latino Politics and Public Policy *Units: 4*
- ES 4900 - Independent Study *Units: 4*
- HIST 3515 - Mexican Americans and the West *Units: 4*
- LAST 3000 Latin American World *Units: 4*
- LAST 3260 Latin American Women and Globalization *Units: 4*
- LAST 3370 Latin American Social Movements
- LAST 3999 Issues in Latin American Studies
- SOC 3416 Sociology of the Mexican American Family *Units: 4*

IV. Electives (24 Units)

Students may choose any of 6 4-unit courses from any of the options not selected for the primary option in consultation with an advisor..

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

French, B.A.

Program Description

The Department of Modern Languages and Literatures at Cal State East Bay offers courses of study leading to a Bachelor of Arts degree with majors in French and Spanish. Academic Minors are offered in French, German, Italian, Portuguese, Russian, Sign Language, Spanish and Chinese Language and Cultural Studies. Elementary courses are offered also in Filipino and Japanese. All programs have been designed to provide students with the cultural understanding and the academic knowledge necessary for future pursuits in the teaching of foreign languages and literatures or for graduate work in the same fields. Students may utilize other languages and literatures offered in the department as part of a Special Major in various area studies.

An International Studies, B.A. is administered through the Department of Political Science (Undergraduate). The International Studies major consists of an integrated group of courses reflecting international aspects of various disciplines and requires intermediate level competency in a modern language. It is designed to provide the student with a broad base of understanding of the interrelationship of the world community, while at the same time providing the opportunity to specialize in an area of interest. An International Studies Minor is also offered. See the listing under International Studies for further details.

With the growing involvement of the United States in international business and the increasingly multicultural character of American society itself, the importance of foreign languages in nearly every kind of occupation is considerable. The majors in foreign languages and literatures, therefore, may lead to teaching careers and represent direct, practical assets in other fields such as business, industry and commerce, civil service, law, library science, media, science, health services, social work, travel, and tourism.

Student Learning Outcomes

Students graduating with a French, B.A. or a Spanish, B.A. from Cal State East Bay will be able to:

1. express themselves with sufficient accuracy and clarity to carry on conversations in French or Spanish with native speakers and to give oral presentations appropriate to the Undergraduate level;
2. express themselves in the written language with a fair amount of sophistication, integrate research information into written assignments, giving adequate credit to the sources of information used, demonstrate critical and creative thinking while applying analytical and qualitative reasoning to address complex challenges and everyday problems
3. be familiar with the major writers, periods, and genres of French literature (France and other French speaking regions throughout the world: Africa, The Caribbean, Canada, Belgium and Switzerland) or, Spanish and/or Spanish American literature (Spain, Mexico, Central America, the Caribbean, South America, and other Spanish speaking regions throughout the world). Students should be able to relate the works and genres to the socio-historical context in which they developed; and
4. demonstrate that they have acquired knowledge of the cultural diversity of literatures in the French or Spanish-speaking world while developing an appreciation of the French or Spanish (and/or Spanish American) cultural contributions to the body of universal culture such as literature, art, music, cinema, and history.

Career Opportunities

- Teaching
- Business
- Industry and Commerce
- Law and Law Enforcement
- Library Science
- Mass Communication
- Health and Social Services
- Travel and Tourism
- Translation and Interpretation

- Government Service

Features

The department faculty come from a wide variety of national and academic backgrounds and have traveled extensively in the countries whose languages they are teaching. Slides, films, dramatic performances, potluck dinners and other activities provide the opportunity for students to interact with one another and with their professors. For those who wish to further their interest in a foreign culture and language, the Department of Modern Languages and Literatures offers clubs. Foreign Language Clubs include the French Club, the German Club, the Tomodachi Club (Japanese Cultural Club), and the Spanish Language Club.

For those who wish to accelerate their learning of another language, the department offers a Summer quarter intensive program in Spanish which covers one year's work in one quarter and yields twelve units of credit. The language laboratory is another useful feature of the department. In the laboratory students can listen to tapes which help improve their pronunciation, fluency, and comprehension. In addition, students are encouraged to take advantage of the California State University International Programs. They can take courses in a variety of universities abroad and apply them towards a degree at Cal State East Bay.

Preparation

For students to enroll at the proper level of language instruction, the department recommends the following guideline: one year of high school foreign language instruction equals one quarter of Cal State East Bay instruction. Students are expected not to repeat credit already earned in high school unless significant time has passed since the initial instruction. The department offers placement exams to facilitate student placement. Students should contact the department before enrolling in a lower division language class.

Students in foreign language majors, minors, and options may have lower division language requirements waived for those courses below the level at which they enroll.

Advanced Placement

A student who has successfully completed the advanced placement course in a foreign language or literature in high school and has a score of 3 or better on the Advanced Placement Examination will receive 8-12 units of credit equivalent to two or three courses of a foreign language as listed below.

If you have completed the French Language examination with a score of 3 or better, you will receive 12 units of credit equivalent to MLL 2101, MLL 2102, and MLL 2103. If you have completed the German Language examination with a score of 3 or better, you will receive 12 units of credit equivalent to intermediate German coursework. If you have completed the Spanish Language examination with a score of 3 or better, you will receive 12 units of credit equivalent to MLL 2401, MLL 2402, and MLL 2403. If you have completed the Spanish Literature examination with a score of 3 or better, you will receive 8 units of credit equivalent to MLL 3400 and MLL 4455.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements.

French

The French major consists of 44-68 units; the B.A. degree requires a total of 180 units. Acquisition of a reading knowledge in a second foreign language is strongly recommended.

A. Lower Division (0-24 units)

- MLL 1101 - Elementary French I *Units: 4*
- MLL 1102 - Elementary French II *Units: 4*
- MLL 1103 - Elementary French III *Units: 4*
- MLL 2101 - Intermediate French I *Units: 4*
- MLL 2102 - Intermediate French II *Units: 4*

- MLL 2103 - Intermediate French III *Units: 4*
or equivalent

Note:

Lower division requirements will be waived for student with prior knowledge of the language. See the "Advanced Placement" section above.

B. Upper Division (44 units)

- Eight upper division units in French composition and advanced composition, with consent of Department *Units: 8*
and
- MLL 3130 - Francophone Culture and Civilization through Cinema *Units: 4*
- Thirty-two units from among the other upper division French courses *Units: 32*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Geography, B.A.

Program Description

Geography is the study of spatial distributions, relations, processes and outcomes within the human-environment system. Attention is focused on historical and contemporary human activities in the natural and built environment, and on people as the major physical, social, cultural and economic change agents across the earth's surface. A curriculum in Geography helps students understand the world's landscape and how it has been transformed or altered by either the earth's natural processes or human modifications, and the future sustainability of our current actions in the light of our past experiences.

At Cal State East Bay, students can choose between a Bachelor of Science (B.S.) degree and a Bachelor of Arts (B.A.) degree with a major in Geography. A B.S. degree major is appropriately suited for students with career objectives in the professional field of Geography. It is also highly recommended for those planning to enter a graduate school program in Geography. Obtaining a Bachelors of Arts degree major provides for a liberal education, and prepares students for positions in business, government, foreign service, and especially teaching. Combining geography with coursework in other social sciences or with other science fields is excellent preparation for teachers in secondary education. Both majors require 61 units, 16 lower division and 45 upper division.

Student Learning Outcomes

Students graduating with a Geography, B.A. or Geography, B.S. from Cal State East Bay will be able to:

1. demonstrate a broad and deep understanding of the fundamental concepts and techniques of the discipline of Geography;
2. prepare, use, and interpret maps and other spatial data with and without the aid of computers;
3. communicate geographic ideas, perspectives and conclusions clearly and persuasively orally, in writing and through maps and graphics;
4. think critically and apply analytical and quantitative reasoning to assess problems across local, national and global geographic scales and to effect practical and sustainable solutions both as an individual and within a team;
5. demonstrate their knowledge of the characteristics and cultures of two world regions in addition to their own.

Career Opportunities

- Aerial Photo Interpreter
- Agricultural Geographer

- Cartographer
- Census Analyst
- Climatologist
- Community Development Specialist
- Demographer
- Development Specialist
- Ecologist
- Economic Development Analyst
- Environmental Analyst/Planner
- Geographical Information Systems Specialist
- Map Curator
- Natural Resources Manager
- Park Ranger
- Public Utility Administrator
- Recreational Resource Planner
- Soil Conservationist
- Sustainability Coordinator
- Transportation Planner
- Urban Geographer
- Zoning Specialist/Surveyor

Features

With the arrangement of a faculty advisor, students in the Bachelor of Science program can select from the following fields of concentration: biogeography, cartography, cultural geography, economic geography, historical geography, history and philosophy of geography, physical geography, regional geography, resource management and sustainability.

The department also offers two certificate programs open to students from all majors. The first is a Cartography and GIS Certificate for those wanting to learn skills and methods in data collection, interpretation, and analysis as well as the design, compilation, production, and reproduction of maps. The second is a Sustainable Resource Management Certificate for those wanting a specialization in the field of sustainable resource and environmental management.

Geographic internships and service learning options are available to our majors. Individual students can gain practical experience with public, private, or volunteer agencies.

Scholarship

Richard and Evelyn Thoman Scholarship in Geography and Environmental Studies

One \$500 scholarship is awarded each academic year for full-time undergraduate or graduate studies. Awards are limited to students with upper division or graduate standing. A grade point average of 3.5 or higher is required, and demonstrated scholastic and creative ability in the field of Geography or Environmental Studies.

Major Requirements (B.A.)

The major consists of 61-73 units in geography; the B.A. degree requires a total of 180 units.

I. Lower Division (12 units)

- GEOG 2100 - Physical Geography *Units: 4*
- GEOG 2300 - Cultural Geography *Units: 4*
- GEOG 2310 - Economic and Resource Geography *Units: 4*

II. Upper Division (49 units)

- GEOG 3450 - Literature and Research Methods *Units: 5*
- Four units of an upper division GEOG course covering field geography of the San Francisco Bay region with consent of advisor *Units: 4*

One Physical Course (4 units):

- GEOG 3115 - Physical Landscape Analysis *Units: 4*

One Technical Course (4 units)

selected from:

- GEOG 3410 - Air-Photo Interpretation *Units: 4*
- GEOG 3600 - Cartographic Principles and Graphic Communication *Units: 4*

One Cultural Course (4 units)

- One Cultural Course (4 units) selected from GEOG 3000-level courses with consent of advisor.

Two Resource Courses (8 units)

selected from:

- GEOG 3000 - Sustainable Resource Management *Units: 4*
- GEOG 3320 - Food, Culture and Environment *Units: 4*
- GEOG 4320 - Energy and Society *Units: 4*
- GEOG 4350 - Water Resources and Management *Units: 4*

One Regional Course (4 units)

- One Regional Course (4 units) selected from 3500 series

Plus 16 units of electives

- Plus 16 units of electives in geography, including not more than 4 additional units in the 3500 series, and to include at least 8 units of the 4000-level series by advisement

Note:

The following courses or their equivalents have to be completed if a student in the B.A. program in Geography desires to enter the M.A. degree program in Geography:

- GEOG 3410 - Air-Photo Interpretation *Units: 4*
- GEOG 3600 - Cartographic Principles and Graphic Communication *Units: 4*
- GEOG 3000-level course in applied field studies, with consent of advisor

III. Proficiency Requirements (0-12 units)

Proficiency in reading a foreign language, at the first-year level, must be demonstrated by successful completion of a departmental examination; or proficiency in statistics, at the level of a 3000-series course, must be demonstrated by passing an examination set by the Statistics Department; or

proficiency in Mathematics, at the level of Calculus III, must be certified by the Department of Mathematics and Computer Science. Appropriate coursework will be recommended to students who do not pass an examination.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Geography, B.S.

Program Description

Geography is the study of spatial distributions, relations, processes and outcomes within the human-environment system. Attention is focused on historical and contemporary human activities in the natural and built environment, and on people as the major physical, social, cultural and economic change agents across the earth's surface. A curriculum in Geography helps students understand the world's landscape and how it has been transformed or altered by either the earth's natural processes or human modifications, and the future sustainability of our current actions in the light of our past experiences.

At Cal State East Bay, students can choose between a Bachelor of Science (B.S.) degree and a Bachelor of Arts (B.A.) degree with a major in Geography. A B.S. degree major is appropriately suited for students with career objectives in the professional field of Geography. It is also highly recommended for those planning to enter a graduate school program in Geography. Obtaining a Bachelors of Arts degree major provides for a liberal education, and prepares students for positions in business, government, foreign service, and especially teaching. Combining geography with coursework in other social sciences or with other science fields is excellent preparation for teachers in secondary education. Both majors require 61 units, 16 lower division and 45 upper division.

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Students graduating with a Geography, B.A. or Geography, B.S. from Cal State East Bay will be able to:

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2. prepare, use, and interpret maps and other spatial data with and without the aid of computers;
3. communicate geographic ideas, perspectives and conclusions clearly and persuasively orally, in writing and through maps and graphics;
4. think critically and apply analytical and quantitative reasoning to assess problems across local, national and global geographic scales and to effect practical and sustainable solutions both as an individual and within a team;
5. demonstrate their knowledge of the characteristics and cultures of two world regions in addition to their own.

Career Opportunities

- Aerial Photo Interpreter
- Agricultural Geographer
- Cartographer
- Census Analyst
- Climatologist
- Community Development Specialist
- Demographer
- Development Specialist
- Ecologist
- Economic Development Analyst
- Environmental Analyst/Planner
- Geographical Information Systems Specialist
- Map Curator

- Natural Resources Manager
- Park Ranger
- Public Utility Administrator
- Recreational Resource Planner
- Soil Conservationist
- Sustainability Coordinator
- Transportation Planner
- Urban Geographer
- Zoning Specialist/Surveyor

Features

With the arrangement of a faculty advisor, students in the Bachelor of Science program can select from the following fields of concentration: biogeography, cartography, cultural geography, economic geography, historical geography, history and philosophy of geography, physical geography, regional geography, resource management and sustainability.

The department also offers two certificate programs open to students from all majors. The first is a Cartography and GIS Certificate for those wanting to learn skills and methods in data collection, interpretation, and analysis as well as the design, compilation, production, and reproduction of maps. The second is a Sustainable Resource Management Certificate for those wanting a specialization in the field of sustainable resource and environmental management.

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One \$500 scholarship is awarded each academic year for full-time undergraduate or graduate studies. Awards are limited to students with upper division or graduate standing. A grade point average of 3.5 or higher is required, and demonstrated scholastic and creative ability in the field of Geography or Environmental Studies.

Major Requirements (B.S.)

The major consists of 61-73 units in Geography; the B.S. requires a total of 180 units.

I. Lower Division (12 units)

- GEOG 2100 - Physical Geography *Units: 4*
- GEOG 2300 - Cultural Geography *Units: 4*
- GEOG 2310 - Economic and Resource Geography *Units: 4*

II. Upper Division (49 units)

- GEOG 3410 - Air-Photo Interpretation *Units: 4*
- GEOG 3450 - Literature and Research Methods *Units: 5*
- GEOG 3600 - Cartographic Principles and Graphic Communication *Units: 4*
- GEOG 3000-level course in applied field studies, with consent of advisor *Units: 4*

One Physical Course (4 units):

- GEOG 3115 - Physical Landscape Analysis *Units: 4*

Two Cultural Course (8 units)

- Two Cultural Course (8 units) selected from the group comprising the 3300 series

One Field Course (4 units):

- GEOG 4325 - Field Course in Cultural-Urban Geography *Units: 4*

Two Regional Courses (8 units)

- Two Regional Courses (8 units) selected from the 3500 series.

Plus 8 units of electives

- Plus 8 units of electives in Geography, in the 4000 series by advisement.

III. Proficiency Requirements (0-12 units)

Proficiency in reading a modern language, at the first-year level, must be demonstrated by successful completion of a departmental examination; or proficiency in statistics, at the level of a 3000 series course, must be demonstrated by passing an examination set by the Statistics Department; or proficiency in Mathematics, at the level of Calculus III, must be certified by the Department of Mathematics and Computer Science. Appropriate coursework will be recommended to students who do not pass an examination.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Geology, B.A.

Program Description

Geology is the study of the earth and of life and the natural processes occurring on the earth through time. Students learn about the causes of earth processes such as earthquakes, volcanoes, the formation of mountains, the effect of erosion and deposition, and the formation of rocks and minerals and their uses. Coursework combined with observations on field trips provide Cal State East Bay students with an understanding of natural processes and the human impact on the environment.

The undergraduate degree programs consist of required courses plus electives designed to meet the needs of students with objectives including employment at the Bachelor's degree level, preparation for a secondary school teaching credential, and graduate study in Geology. The Geology, B.S. program is the primary professional degree program in Geology offered by the department, and serves as preparation for employment in the field, usually in a technical capacity. The Geology, B.A. program offers the student a greater degree of flexibility and may be more appropriate for those who do not necessarily plan to become professional geologists or pursue graduate study. (Note: Transfer from the Geology, B.A. to the Geology, B.S. program or vice versa can be accomplished.) Students wishing to do independent geological work professionally should plan on graduate study; see the Geology, M.S. program in the Department of Earth and Environmental Sciences (Graduate).

Student Learning Outcomes

Students graduating with a Geology, B.S. or Geology, B.A. from Cal State East Bay will be able to:

1. identify and classify geologic materials, including minerals, rocks, and fossils, and know their material and/or biological properties or characteristics.
2. collect, organize, and analyze qualitative and quantitative data from both field and laboratory investigations such as lithostratigraphic and biostratigraphic correlations, geologic maps, geophysical surveys, cross-sections, soil tests, and geochemical and groundwater quality analyses.
3. synthesize, interpret and critically analyze geologic datasets (2D and 3D) and reports using discipline-specific methods, techniques, and equipment.
4. critically analyze geological and environmental issues through the evaluation of scientific literature, and present their positions clearly and persuasively in written and oral form.
5. understand geologic time, evolution, Earth's place in the Universe, and global-scale processes such as plate tectonics, earth systems interactions, and climate change.

Career Opportunities

- Engineering Geologist
- Environmental Geologist
- Geochemist
- Geologist
- Geophysicist
- Hydrologist
- Mineralogist
- Paleontologist
- Park Ranger
- Petrologist
- Seismologist
- Soils Engineer
- Stratigrapher
- Oceanographer

Features

The undergraduate Geology programs emphasize field and laboratory training. Many opportunities for field and laboratory research exist throughout northern California and elsewhere.

The Cummings Earth Science Club, a student-run organization, sponsors a variety of activities including guest speakers, field trips, employment workshops, and student-faculty gatherings. The club is an important part of department life, providing students with opportunities to make professional contacts, to explore graduate school and professional options, and to enjoy the company of others with similar interests. For more information, contact the faculty advisor or the current club president at (510) 885-3486.

Students completing the Geology major may apply four (4) units of mathematics and eight (8) units of chemistry (or physics) to the Natural Sciences and Mathematics requirement (Area B) in their General Education Requirements. (See the General Education Evaluator and Class Schedule for more information.)

Major Requirements (B.A.)

The major consists of 72-75 units; the B.A. requires a total of 180 units.

I. Core Courses (55-58 units)

- CHEM 1101 - General Chemistry *Units: 5*
- CHEM 1102 - General Chemistry *Units: 5*
- CHEM 1103 - General Chemistry *Units: 5*
and
- PHYS 1700 - Elementary Physics *Units: 4*
and
- PHYS 1780 - Elementary Physics Laboratory *Units: 1*

or

- CHEM 1100 - Introduction to College Chemistry *Units: 5*
and
- PHYS 2701 - Introductory Physics: Force, Mass and Motion *Units: 4*
- PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*
- PHYS 2703 - Introductory Physics: Light and Modern Physics *Units: 4*

- GEOL 2101 - Physical Geology *Units: 5*
- GEOL 2102 - Earth and Life Through Time *Units: 4*
- GEOL 3601 - Mineralogy and Optical Crystallography *Units: 5*
- GEOL 3701 - Igneous and Metamorphic Petrology *Units: 5*
- GEOL 3801 - Sedimentology and Stratigraphy *Units: 5*
- GEOL 3810 - Structural Geology *Units: 5*
- GEOL 3910 - Geologic Field Methods *Units: 3*
- GEOL 4800 - Seminar *Units: 2*
- MATH 1300 - Trigonometry and Analytic Geometry *Units: 4*

II. Electives (17 units)

Any additional geology courses at the 3000 and 4000 level. At least two courses must be at the 4000 level (no more than 4 units of GEOL 4900 may be applied).

Except:

- GEOL 3040 - Weather and the Atmosphere *Units: 4*
- GEOL 3050 - Volcanoes and Plate Tectonics *Units: 4*
- GEOL 3060 - Exploring the Solar System *Units: 4*
- GEOL 3100 - Geology of the Western National Parks *Units: 4*
- GEOL 3401 - The Oceans *Units: 4*
- GEOL 3898 - Cooperative Education *Units: 1-4*

Other Degree Requirements

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Geology, B.S.

Program Description

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The undergraduate degree programs consist of required courses plus electives designed to meet the needs of students with objectives including employment at the Bachelor's degree level, preparation for a secondary school teaching credential, and graduate study in Geology. The Geology, B.S. program is the primary professional degree program in Geology offered by the department, and serves as preparation for employment in the field, usually in a technical capacity. The Geology, B.A. program offers the student a greater degree of flexibility and may be more appropriate for those who do not necessarily plan to become professional geologists or pursue graduate study. (Note: Transfer from the Geology, B.A. to the

Geology, B.S. program or vice versa can be accomplished.) Students wishing to do independent geological work professionally should plan on graduate study; see the Geology, M.S. program in the Department of Earth and Environmental Sciences (Graduate).

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Students graduating with a Geology, B.S. or Geology, B.A. from Cal State East Bay will be able to:

1. identify and classify geologic materials, including minerals, rocks, and fossils, and know their material and/or biological properties or characteristics.
2. collect, organize, and analyze qualitative and quantitative data from both field and laboratory investigations such as lithostratigraphic and biostratigraphic correlations, geologic maps, geophysical surveys, cross-sections, soil tests, and geochemical and groundwater quality analyses.
3. synthesize, interpret and critically analyze geologic datasets (2D and 3D) and reports using discipline-specific methods, techniques, and equipment.
4. critically analyze geological and environmental issues through the evaluation of scientific literature, and present their positions clearly and persuasively in written and oral form.
5. understand geologic time, evolution, Earth's place in the Universe, and global-scale processes such as plate tectonics, earth systems interactions, and climate change.

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- Engineering Geologist
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The Cummings Earth Science Club, a student-run organization, sponsors a variety of activities including guest speakers, field trips, employment workshops, and student-faculty gatherings. The club is an important part of department life, providing students with opportunities to make professional contacts, to explore graduate school and professional options, and to enjoy the company of others with similar interests. For more information, contact the faculty advisor or the current club president at (510) 885-3486.

Students completing the Geology major may apply four (4) units of mathematics and eight (8) units of chemistry (or physics) to the Natural Sciences and Mathematics requirement (Area B) in their General Education Requirements. (See the General Education Evaluator and Class Schedule for more information.)

Major Requirements (B.S.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 108 units; the B.S. degree requires a total of 180 units.

I. Core Courses (77-80 units)

- CHEM 1101 - General Chemistry *Units: 5*
 - CHEM 1102 - General Chemistry *Units: 5*
 - CHEM 1103 - General Chemistry *Units: 5*
 - GEOL 2101 - Physical Geology *Units: 5*
 - GEOL 2102 - Earth and Life Through Time *Units: 4*
 - GEOL 3601 - Mineralogy and Optical Crystallography *Units: 5*
 - GEOL 3701 - Igneous and Metamorphic Petrology *Units: 5*
 - GEOL 3801 - Sedimentology and Stratigraphy *Units: 5*
 - GEOL 3810 - Structural Geology *Units: 5*
 - GEOL 3910 - Geologic Field Methods *Units: 3*
 - GEOL 4800 - Seminar *Units: 2*
 - GEOL 4000-level course on Field Geology, with consent of advisor *Units: 8*
 - MATH 1304 - Calculus I *Units: 4*
 - MATH 1305 - Calculus II *Units: 4*

 - PHYS 1001 - General Physics: Newtonian Mechanics and Oscillations *Units: 5*
 - PHYS 1002 - General Physics: Thermodynamics and Optics *Units: 5*
 - PHYS 1003 - General Physics: Electromagnetism *Units: 5*
- or*
- PHYS 2701 - Introductory Physics: Force, Mass and Motion *Units: 4*
 - PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*
 - PHYS 2703 - Introductory Physics: Light and Modern Physics *Units: 4*¹

Footnote

1. Students needing a relatively rigorous preparation in mathematics and physics (e.g., for graduate study) are strongly urged to complete the calculus-based physics sequence (PHYS 1001, PHYS 1002, PHYS 1003); this requires completion of the additional calculus course MATH 2304. The additional 4 units earned in calculus may be applied to elective requirement II.

II. Electives (28-31 units)

Twenty-eight (28) to 31 units, depending on physics sequence completed, from among the courses listed below. At least 10 units must be in 4000-level geology courses. Up to 12 of the elective units may be satisfied with appropriate courses in Biological Sciences, Chemistry, Mathematics and Computer Science, Physics, and/or Statistics approved in advance by a faculty advisor.

- GEOL 3110 - Principles of Geomorphology *Units: 4*
- GEOL 3400 - General Oceanography *Units: 4*
- GEOL 4010 - Applied Geophysics *Units: 5*
- GEOL 4130 - Survey of Geochemistry *Units: 4*
- GEOL 4320 - Hydrogeology *Units: 4*
- GEOL 4800 - Seminar *Units: 2* (not more than 2 units)
- GEOL 4900 - Independent Study *Units: 1-4*
- GEOL 4910 - Senior Thesis *Units: 2* (not more than 4 units for GEOL 4900 and GEOL 4910 combined)

Students interested in a specific subdiscipline (e.g., applied geology, oceanography, geochemistry) are urged to consult the appropriate departmental faculty advisor to ensure an appropriate choice of electives.

Note:

Course substitutions made after arrival at Cal State East Bay must have prior written approval of the faculty advisor.

Health Sciences, Administration and Management Option, B.S.

Program Description

Health, the second largest industry in the United States, employs over eight million workers. Physicians represent only 7% of this workforce, and there are over 200 other professions in the health sciences field. Many of these professions can be entered directly with a B.S. degree in Health Sciences. Other professions may require graduate training. Career opportunities and competition for admission to programs varies with each profession. Students should, therefore, plan carefully with a faculty advisor for career and training alternatives. The B.S. degree with a major in Health Sciences offers a program of instruction with four elective areas of study (options). Students select one of these options to meet career needs and should seek faculty advising in making their selection.

Student Learning Outcomes

Students graduating with a B.S. in Health Sciences from Cal State East Bay will be able to:

1. Integrate and synthesize knowledge from general education courses and courses in the biological, physical, social and health sciences;
2. Communicate effectively in the provision of healthcare services to the community;
3. Work effectively as individuals, teams, partnerships and larger groups toward accomplishing healthcare goals;
4. Apply ethics and professional standards to interactions with colleagues, supervisors and staff, diverse and multicultural clients, and with the general public;
5. Evaluate scientific and policy research to solve problems in the health sciences.

Career Opportunities

By selecting one of the four elective areas of study, students can prepare for graduate study or for employment in an entry-level career position. Graduate study is available in several fields: the clinical health professions, community health education, epidemiology, health administration, planning, and other public health specialties. Graduates of the program are prepared to enter career positions in both governmental and non-governmental organizations. These include state and county health departments, hospitals, community clinics, health service agencies, nursing homes, environmental health agencies, insurance and pharmaceutical companies, and many other employment settings.

Major Requirements (B.S.)

The major in Health Sciences consists of 115-126 units; the B.S. degree requires a total of 180 units.

Note:

A grade of 'C' or better is required in each course with an HSC prefix. All Upper and Lower Division Core courses must be taken for a letter grade. Credit/No Credit is not accepted.

The following Lower Division and Upper Division Core must be completed for the following options only: Administration and Management Option, Pre-Clinical Preparation Option with a Pre-Nursing Specialization or Pre-Health Specialization, and the Community Health Option. (Please Note: The Option in Pre-Clinical Preparation with a Pre-Doctoral Specialization and the Option in Environmental Health and Safety each have their own list of Lower Division and Upper Division Core courses). In addition, all HSC courses with 3000 and 4000 prefixes must be taken at CSU East Bay.

I. Lower Division Core (45-47 units)

- ANTH 1000 - Introduction to Anthropology *Units: 4*
or SOC 1000 (4)
or SOC 1002 (4)
- BIOL 1001 - Introduction to Biology *Units: 4*
or BIOL 1005 (4)
and BIOL 1002 (1) or BIOL 1004 (1) or BIOL 2005 (1)
- BIOL 2010 - Human Physiology and Anatomy I *Units: 5*
or BIOL 2011 (5)
- BIOL 2020 - Human Physiology and Anatomy II *Units: 5*
- BIOL 2025 - Introduction to Microbiology *Units: 5*

or BIOL 3405 (6)

or BIOL 4010 (4)

- HSC 1000 - Introduction to Health Professions Practice *Units: 4*
- HSC 1100 - Health: Maintenance of Wellness *Units: 4*
- NURS 2010 - Principles of Nutrition and Medical Nutrition Therapy *Units: 4*
or BIOL 3070 (4)
- PSYC 1000 - General Psychology *Units: 5*
or PSYC 1001 (5)
or PSYC 1005 (5)
- STAT 1000 - Elements of Probability and Statistics *Units: 5*

II. Upper Division Core (43)

- ANTH 3720 - Medical Anthropology *Units: 4*
or SOC 4720 (4)
- HSC 3200 - Environmental Health *Units: 4*
- HSC 3300 - Health Care Systems in the U.S. *Units: 4*
- HSC 3350 - Health Legislation and Government Programs *Units: 4*
- HSC 3400 - Community Health *Units: 4*
- HSC 3550 - Health Care Law and Ethics *Units: 4*
- HSC 3800 - Multicultural Issues in Health Care *Units: 4*
- HSC 4010 - Research and Program Evaluation in Health Science *Units: 4*
- HSC 4500 - Supervised Field Training and Report Writing *Units: 3*
- HSC 4600 - Health Systems Management *Units: 4*
- HSC 4700 - Senior Seminar *Units: 4*

III. Options (36-65 units)

Select one of the four options in consultation with your faculty advisor. The choice of option should reflect your career goals and a willingness to acquire an in-depth knowledge of one area of the Health Sciences major.

Note:

Non-Health Sciences option courses may have prerequisites. Include these prerequisites in your academic planning.

Administration and Management Option (36 units)

See Lower Division Core and Upper Division Core as outlined above in sections I and II.

Complete the following courses (20 units):

- ACCT 2251 - Introduction to Financial Accounting *Units: 4*
- ECON 2301 - Principles of Microeconomics *Units: 4*
- HSC 2200 - Research and Writing in Health Care *Units: 4*
- MGMT 3600 - Theories of Management *Units: 4*
or
- HSC 4650 - Advanced Principles of Health Care Management *Units: 4*
- MKTG 3401 - Marketing Principles *Units: 4*

Note:

Select an additional 16 units from one or more of the following areas: management, policy, evaluation, finance, or marketing in consultation with your faculty advisor.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Health Sciences, Community Health Option, B.S.

Program Description

Health, the second largest industry in the United States, employs over eight million workers. Physicians represent only 7% of this workforce, and there are over 200 other professions in the health sciences field. Many of these professions can be entered directly with a B.S. degree in Health Sciences. Other professions may require graduate training. Career opportunities and competition for admission to programs varies with each profession. Students should, therefore, plan carefully with a faculty advisor for career and training alternatives. The B.S. degree with a major in Health Sciences offers a program of instruction with four elective areas of study (options). Students select one of these options to meet career needs and should seek faculty advising in making their selection.

Student Learning Outcomes

Students graduating with a B.S. in Health Sciences from Cal State East Bay will be able to:

1. Integrate and synthesize knowledge from general education courses and courses in the biological, physical, social and health sciences;
2. Communicate effectively in the provision of healthcare services to the community;
3. Work effectively as individuals, teams, partnerships and larger groups toward accomplishing healthcare goals;
4. Apply ethics and professional standards to interactions with colleagues, supervisors and staff, diverse and multicultural clients, and with the general public;
5. Evaluate scientific and policy research to solve problems in the health sciences.

Career Opportunities

By selecting one of the four elective areas of study, students can prepare for graduate study or for employment in an entry-level career position. Graduate study is available in several fields: the clinical health professions, community health education, epidemiology, health administration, planning, and other public health specialties. Graduates of the program are prepared to enter career positions in both governmental and non-governmental organizations. These include state and county health departments, hospitals, community clinics, health service agencies, nursing homes, environmental health agencies, insurance and pharmaceutical companies, and many other employment settings.

Major Requirements (B.S.)

The major in Health Sciences consists of 115-126 units; the B.S. degree requires a total of 180 units.

Note:

A grade of 'C' or better is required in each course with an HSC prefix. All Upper and Lower Division Core courses must be taken for a letter grade. Credit/No Credit is not accepted.

The following Lower Division and Upper Division Core must be completed for the following options only: Administration and Management Option, Pre-Clinical Preparation Option with a Pre-Nursing Specialization or Pre-Health Specialization, and the Community Health Option. (Please Note: The Option in Pre-Clinical Preparation with a Pre-Doctoral Specialization and the Option in Environmental Health and Safety each have their

own list of Lower Division and Upper Division Core courses). In addition, all HSC courses with 3000 and 4000 prefixes must be taken at CSU East Bay.

I. Lower Division Core (45-47 units)

- ANTH 1000 - Introduction to Anthropology *Units: 4*
or SOC 1000 (4)
or SOC 1002 (4)
- BIOL 1001 - Introduction to Biology *Units: 4*
or BIOL 1005 (4)
and BIOL 1002 (1) or BIOL 1004 (1) or BIOL 2005 (1)
- BIOL 2010 - Human Physiology and Anatomy I *Units: 5*
or BIOL 2011 (5)
- BIOL 2020 - Human Physiology and Anatomy II *Units: 5*
- BIOL 2025 - Introduction to Microbiology *Units: 5*
or BIOL 3405 (6)
or BIOL 4010 (4)
- HSC 1000 - Introduction to Health Professions Practice *Units: 4*
- HSC 1100 - Health: Maintenance of Wellness *Units: 4*
- NURS 2010 - Principles of Nutrition and Medical Nutrition Therapy *Units: 4*
or BIOL 3070 (4)
- PSYC 1000 - General Psychology *Units: 5*
or PSYC 1001 (5)
or PSYC 1005 (5)
- STAT 1000 - Elements of Probability and Statistics *Units: 5*

II. Upper Division Core (43)

- ANTH 3720 - Medical Anthropology *Units: 4*
or SOC 4720 (4)
- HSC 3200 - Environmental Health *Units: 4*
- HSC 3300 - Health Care Systems in the U.S. *Units: 4*
- HSC 3350 - Health Legislation and Government Programs *Units: 4*
- HSC 3400 - Community Health *Units: 4*
- HSC 3550 - Health Care Law and Ethics *Units: 4*
- HSC 3800 - Multicultural Issues in Health Care *Units: 4*
- HSC 4010 - Research and Program Evaluation in Health Science *Units: 4*
- HSC 4500 - Supervised Field Training and Report Writing *Units: 3*
- HSC 4600 - Health Systems Management *Units: 4*
- HSC 4700 - Senior Seminar *Units: 4*

III. Options (36-65 units)

Select one of the four options in consultation with your faculty advisor. The choice of option should reflect your career goals and a willingness to acquire an in-depth knowledge of one area of the Health Sciences major.

Note:

Non-Health Sciences option courses may have prerequisites. Include these prerequisites in your academic planning.

Community Health Option (36 units)

This option will prepare you for a national exam and potential certification as a Community Health Educator Specialist. See Lower Division Core and Upper Division Core as outlined above in sections I and II.

Note: Please see Errata page for corrections to this content.

Complete the following courses (20 units):

- BIOL 3020 - Genetics, Evolution, and Humanity *Units: 4*
or HSC 3250 (4)
- BIOL 3065 - Humans and Sex *Units: 4*
- BIOL 3410 - Epidemiology *Units: 4*
or HSC 3410 Epidemiology for Health Sciences Units: 4
- HSC 2200 - Research and Writing in Health Care *Units: 4*
- HSC 3700 - Health Behavior and Health Education Theory *Units: 4*

Select an additional 16 units of coursework from the list below in consultation with your faculty advisor.

- COMM 3240 Public Opinion *Units: 4*
- COMM 3510 - Small Group Communication *Units: 4*
- HSC 2510 - Introduction to Peer Health Education *Units: 3*
- HSC 2550 - Peer Health Education Practicum *Units: 2-3*
- HDEV 3800 - Human Development and Interaction *Units: 4*
- MGMT 3614 - Organizational Behavior *Units: 4*
- MKTG 3401 - Marketing Principles *Units: 4*
- MKTG 3425 - Promotion *Units: 4*
- MKTG 4417 - Consumer Behavior *Units: 4*
- PHIL 3335 - Science, Technology and Values *Units: 4*
- POSC 3330 - Interest Groups, Lobbying, and Political Reform *Units: 4*
- PSYC 3520 - Interpersonal Processes *Units: 4*
- PSYC 3540 - Groups and Organizations *Units: 4*
- PSYC 3550 - Social Influence and Change *Units: 4*
- SOC 3720 - Human Behavior in the Social Environment *Units: 4*
- WOST 3545 - Women's Health and Health Care *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Health Sciences, Environmental Health and Safety Option, B.S.

Program Description

Health, the second largest industry in the United States, employs over eight million workers. Physicians represent only 7% of this workforce, and there are over 200 other professions in the health sciences field. Many of these professions can be entered directly with a B.S. degree in Health Sciences. Other professions may require graduate training. Career opportunities and competition for admission to programs varies with each profession. Students should, therefore, plan carefully with a faculty advisor for career and training alternatives. The B.S. degree with a major in Health Sciences offers a program of instruction with four elective areas of study (options). Students select one of these options to meet career needs and should seek faculty advising in making their selection.

Student Learning Outcomes

Students graduating with a B.S. in Health Sciences from Cal State East Bay will be able to:

1. Integrate and synthesize knowledge from general education courses and courses in the biological, physical, social and health sciences;
2. Communicate effectively in the provision of healthcare services to the community;
3. Work effectively as individuals, teams, partnerships and larger groups toward accomplishing healthcare goals;
4. Apply ethics and professional standards to interactions with colleagues, supervisors and staff, diverse and multicultural clients, and with the general public;
5. Evaluate scientific and policy research to solve problems in the health sciences.

Career Opportunities

By selecting one of the four elective areas of study, students can prepare for graduate study or for employment in an entry-level career position. Graduate study is available in several fields: the clinical health professions, community health education, epidemiology, health administration, planning, and other public health specialties. Graduates of the program are prepared to enter career positions in both governmental and non-governmental organizations. These include state and county health departments, hospitals, community clinics, health service agencies, nursing homes, environmental health agencies, insurance and pharmaceutical companies, and many other employment settings.

Major Requirements (B.S.)

The major in Health Sciences consists of 115-126 units; the B.S. degree requires a total of 180 units.

Note:

A grade of 'C' or better is required in each course with an HSC prefix. All Upper and Lower Division Core courses must be taken for a letter grade. Credit/No Credit is not accepted.

The following Lower Division and Upper Division Core must be completed for the following options only: Administration and Management Option, Pre-Clinical Preparation Option with a Pre-Nursing Specialization or Pre-Health Specialization, and the Community Health Option. (Please Note: The Option in Pre-Clinical Preparation with a Pre-Doctoral Specialization and the Option in Environmental Health and Safety each have their own list of Lower Division and Upper Division Core courses). In addition, all HSC courses with 3000 and 4000 prefixes must be taken at CSU East Bay.

I. Lower Division Core (45-47 units)

- ANTH 1000 - Introduction to Anthropology *Units: 4*
or SOC 1000 (4)
or SOC 1002 (4)
- BIOL 1001 - Introduction to Biology *Units: 4*
or BIOL 1005 (4)
and BIOL 1002 (1) or BIOL 1004 (1) or BIOL 2005 (1)
- BIOL 2010 - Human Physiology and Anatomy I *Units: 5*
or BIOL 2011 (5)
- BIOL 2020 - Human Physiology and Anatomy II *Units: 5*
- BIOL 2025 - Introduction to Microbiology *Units: 5*
or BIOL 3405 (6)
or BIOL 4010 (4)
- HSC 1000 - Introduction to Health Professions Practice *Units: 4*
- HSC 1100 - Health: Maintenance of Wellness *Units: 4*
- NURS 2010 - Principles of Nutrition and Medical Nutrition Therapy *Units: 4*
or BIOL 3070 (4)
- PSYC 1000 - General Psychology *Units: 5*
or PSYC 1001 (5)
or PSYC 1005 (5)

- STAT 1000 - Elements of Probability and Statistics *Units: 5*

II. Upper Division Core (43)

- ANTH 3720 - Medical Anthropology *Units: 4*
or SOC 4720 (4)
- HSC 3200 - Environmental Health *Units: 4*
- HSC 3300 - Health Care Systems in the U.S. *Units: 4*
- HSC 3350 - Health Legislation and Government Programs *Units: 4*
- HSC 3400 - Community Health *Units: 4*
- HSC 3550 - Health Care Law and Ethics *Units: 4*
- HSC 3800 - Multicultural Issues in Health Care *Units: 4*
- HSC 4010 - Research and Program Evaluation in Health Science *Units: 4*
- HSC 4500 - Supervised Field Training and Report Writing *Units: 3*
- HSC 4600 - Health Systems Management *Units: 4*
- HSC 4700 - Senior Seminar *Units: 4*

III. Options (36-65 units)

Select one of the four options in consultation with your faculty advisor. The choice of option should reflect your career goals and a willingness to acquire an in-depth knowledge of one area of the Health Sciences major.

Note:

Non-Health Sciences option courses may have prerequisites. Include these prerequisites in your academic planning.

Environmental Health and Safety Option (60 units for the option; 115 units for major)

NOTE: The Environmental Health and Safety Option has its own separate Lower Division and Upper Division courses, as listed below:

1. Lower Division Core (4 units)

- HSC 2200 - Research and Writing in Health Care *Units: 4*

2. Upper Division Core (51 units)

- STAT 3031 - Statistical Methods in Biology *Units: 4*
- BIOL 3070 - Human Nutrition *Units: 4*
- ANTH 3720 - Medical Anthropology *Units: 4*
or
- SOC 4720 - Medical Sociology *Units: 4*
- HSC 3200 - Environmental Health *Units: 4*
- HSC 3300 - Health Care Systems in the U.S. *Units: 4*
- HSC 3350 - Health Legislation and Government Programs *Units: 4*
- HSC 3400 - Community Health *Units: 4*
- HSC 3550 - Health Care Law and Ethics *Units: 4*
- HSC 3800 - Multicultural Issues in Health Care *Units: 4*
- HSC 4010 - Research and Program Evaluation in Health Science *Units: 4*
- HSC 4500 - Supervised Field Training and Report Writing *Units: 3*
- HSC 4600 - Health Systems Management *Units: 4*

- HSC 4700 - Senior Seminar *Units: 4*

3. Option Courses (60 units)

- BIOL 1401 - Molecular and Cellular Biology *Units: 5*
- BIOL 1402 - Plant Biology *Units: 5*
- BIOL 1403 - Animal Biology *Units: 5*
- BIOL 3405 - Microbiology *Units: 6*
- BIOL 3410 - Epidemiology *Units: 4*
- CHEM 1101 - General Chemistry *Units: 5*
- CHEM 1102 - General Chemistry *Units: 5*
- CHEM 1103 - General Chemistry *Units: 5*
- CHEM 2301 - Survey of Organic Chemistry *Units: 4*
- CHEM 2302 - Survey of Organic Chemistry *Units: 4*
- MATH 1304 - Calculus I *Units: 4*
- PHYS 2701 - Introductory Physics: Force, Mass and Motion *Units: 4*
- PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*

For students preparing to apply for the Registered Environmental Health Specialist (EHS) Certification,

you must select an additional 16 units from the following list of courses. These courses are required for the certification exam but not for the health sciences major.

- ENVT 4100 - Environmental Impact Analysis *Units: 4*
- GEOG 3000 - Sustainable Resource Management *Units: 4*
- GEOG 4350 - Water Resources and Management *Units: 4*
- PHYS 4001 - Electromagnetism I *Units: 3*
- POSC 3460 - Environmental Law *Units: 4*
- POSC 4171 - Public Policy and the Environment *Units: 4*
- REC 3200 - Wellness Through Leisure *Units: 4*
- REC 3305 - Outdoor Living Skills *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Health Sciences, Pre-Clinical Preparation Option, B.S.

Program Description

Health, the second largest industry in the United States, employs over eight million workers. Physicians represent only 7% of this workforce, and there are over 200 other professions in the health sciences field. Many of these professions can be entered directly with a B.S. degree in Health Sciences. Other professions may require graduate training. Career opportunities and competition for admission to programs varies with each profession. Students should, therefore, plan carefully with a faculty advisor for career and training alternatives. The B.S. degree with a major in Health Sciences offers a program of instruction with four elective areas of study (options). Students select one of these options to meet career needs and should seek faculty advising in making their selection.

Student Learning Outcomes

Students graduating with a B.S. in Health Sciences from Cal State East Bay will be able to:

1. Integrate and synthesize knowledge from general education courses and courses in the biological, physical, social and health sciences;
2. Communicate effectively in the provision of healthcare services to the community;
3. Work effectively as individuals, teams, partnerships and larger groups toward accomplishing healthcare goals;
4. Apply ethics and professional standards to interactions with colleagues, supervisors and staff, diverse and multicultural clients, and with the general public;
5. Evaluate scientific and policy research to solve problems in the health sciences.

Career Opportunities

By selecting one of the four elective areas of study, students can prepare for graduate study or for employment in an entry-level career position. Graduate study is available in several fields: the clinical health professions, community health education, epidemiology, health administration, planning, and other public health specialties. Graduates of the program are prepared to enter career positions in both governmental and non-governmental organizations. These include state and county health departments, hospitals, community clinics, health service agencies, nursing homes, environmental health agencies, insurance and pharmaceutical companies, and many other employment settings.

Major Requirements (B.S.)

The major in Health Sciences consists of 115-126 units; the B.S. degree requires a total of 180 units.

Note:

A grade of 'C' or better is required in each course with an HSC prefix. All Upper and Lower Division Core courses must be taken for a letter grade. Credit/No Credit is not accepted.

The following Lower Division and Upper Division Core must be completed for the following options only: Administration and Management Option, Pre-Clinical Preparation Option with a Pre-Nursing Specialization or Pre-Health Specialization, and the Community Health Option. (Please Note: The Option in Pre-Clinical Preparation with a Pre-Doctoral Specialization and the Option in Environmental Health and Safety each have their own list of Lower Division and Upper Division Core courses). In addition, all HSC courses with 3000 and 4000 prefixes must be taken at CSU East Bay.

I. Lower Division Core (45-47 units)

- ANTH 1000 - Introduction to Anthropology *Units: 4*
or SOC 1000 (4)
or SOC 1002 (4)
- BIOL 1001 - Introduction to Biology *Units: 4*
or BIOL 1005 (4)
and BIOL 1002 (1) or BIOL 1004 (1) or BIOL 2005 (1)
- BIOL 2010 - Human Physiology and Anatomy I *Units: 5*
or BIOL 2011 (5)
- BIOL 2020 - Human Physiology and Anatomy II *Units: 5*
- BIOL 2025 - Introduction to Microbiology *Units: 5*
or BIOL 3405 (6)
or BIOL 4010 (4)
- HSC 1000 - Introduction to Health Professions Practice *Units: 4*
- HSC 1100 - Health: Maintenance of Wellness *Units: 4*
- NURS 2010 - Principles of Nutrition and Medical Nutrition Therapy *Units: 4*
or BIOL 3070 (4)
- PSYC 1000 - General Psychology *Units: 5*
or PSYC 1001 (5)
or PSYC 1005 (5)

- STAT 1000 - Elements of Probability and Statistics *Units: 5*

II. Upper Division Core (43)

- ANTH 3720 - Medical Anthropology *Units: 4*
or SOC 4720 (4)
- HSC 3200 - Environmental Health *Units: 4*
- HSC 3300 - Health Care Systems in the U.S. *Units: 4*
- HSC 3350 - Health Legislation and Government Programs *Units: 4*
- HSC 3400 - Community Health *Units: 4*
- HSC 3550 - Health Care Law and Ethics *Units: 4*
- HSC 3800 - Multicultural Issues in Health Care *Units: 4*
- HSC 4010 - Research and Program Evaluation in Health Science *Units: 4*
- HSC 4500 - Supervised Field Training and Report Writing *Units: 3*
- HSC 4600 - Health Systems Management *Units: 4*
- HSC 4700 - Senior Seminar *Units: 4*

III. Options (36-65 units)

Select one of the four options in consultation with your faculty advisor. The choice of option should reflect your career goals and a willingness to acquire an in-depth knowledge of one area of the Health Sciences major.

Note:

Non-Health Sciences option courses may have prerequisites. Include these prerequisites in your academic planning.

Pre-Clinical Preparation Option (36-65 units)

1. Pre-Nursing Specialization (36 units)

See Lower Division Core and Upper Division Core as outlined above in sections I and II.

Complete the following course:

- HSC 2200 - Research and Writing in Health Care *Units: 4*

The following classes will help prepare you for a career in nursing. Select 32 additional units with the approval of your faculty advisor.

- CHEM 1610 - Survey of Basic Chemistry for Health Sciences *Units: 6*
- CHEM 3400 - Introductory Biochemistry *Units: 4*
- COMM 1000 - Public Speaking *Units: 4*
or
- COMM 1004 - Interpersonal Communication *Units: 4*
- HIST 4710 - History and Trends in Nursing *Units: 4*
- HDEV 3800 - Human Development and Interaction *Units: 4*
or
- PSYC 4420 - Developmental Psychology *Units: 4*

- NURS 2005 - Clinical Pathophysiology *Units: 4*
- PSYC 3420 - Stress and Coping *Units: 4*
- PSYC 3500 - Social Psychology *Units: 4*
or
- PSYC 3520 - Interpersonal Processes *Units: 4*

2. Pre-Health Specialization (36 units)

See Lower Division Core and Upper Division Core as outlined above in sections I and II.

Complete the following course:

- HSC 2200 - Research and Writing in Health Care *Units: 4*

Note:

Select 32 additional units in preparation for programs in nutrition, occupational therapy, respiratory therapy, dental hygiene, physical therapy, genetic counseling, or social work. Suggested courses depend on career choice. Courses will be chosen from physical, life, and social sciences, and arts and humanities in consultation with your faculty advisor.

3. Pre-Doctoral Specialization (65 units for the option; 120 units for the major.)

Please Note: The Pre-Doctoral Specialization has its own separate Lower Division and Upper Division courses, as listed below:

a. Lower Division Core (4 units)

- HSC 2200 - Research and Writing in Health Care *Units: 4*

Note:

In preparation for programs in medicine, dentistry, pharmacy, optometry or veterinary science, in addition to your faculty advisor, please also consult and register with the Pre-Professional Health Academic Program (PHAP) Advisor. See PHAP website (www.sci.csueastbay.edu/PHAP) for the recommended course list which includes the following basic science foundation courses.

b. Upper Division Core (51 units)

- STAT 3031 - Statistical Methods in Biology *Units: 4*
- BIOL 3070 - Human Nutrition *Units: 4*
- ANTH 3720 - Medical Anthropology *Units: 4*
or
- SOC 4720 - Medical Sociology *Units: 4*
- HSC 3200 - Environmental Health *Units: 4*
- HSC 3300 - Health Care Systems in the U.S. *Units: 4*
- HSC 3350 - Health Legislation and Government Programs *Units: 4*
- HSC 3400 - Community Health *Units: 4*
- HSC 3550 - Health Care Law and Ethics *Units: 4*
- HSC 3800 - Multicultural Issues in Health Care *Units: 4*
- HSC 4010 - Research and Program Evaluation in Health Science *Units: 4*
- HSC 4500 - Supervised Field Training and Report Writing *Units: 3*
- HSC 4600 - Health Systems Management *Units: 4*

- HSC 4700 - Senior Seminar *Units: 4*

c. Option Courses (65 units)

- BIOL 1401 - Molecular and Cellular Biology *Units: 5*
- BIOL 1402 - Plant Biology *Units: 5*
- BIOL 1403 - Animal Biology *Units: 5*
- CHEM 1101 - General Chemistry *Units: 5*
- CHEM 1102 - General Chemistry *Units: 5*
- CHEM 1103 - General Chemistry *Units: 5*
- CHEM 3301 - Organic Chemistry *Units: 5*
- CHEM 3302 - Organic Chemistry *Units: 5*
- CHEM 3303 - Organic Chemistry *Units: 5*
- PHYS 2701 - Introductory Physics: Force, Mass and Motion *Units: 4*
- PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*
- PHYS 2703 - Introductory Physics: Light and Modern Physics *Units: 4*
- MATH 1304 - Calculus I *Units: 4*
- BIOL 3065 - Humans and Sex *Units: 4*

Note:

The following courses are not required for the health sciences major but are recommended additional preparation for biomedical careers. As different biomedical careers have different course recommendations, students need to consult with a prehealth professions adviser (preprof@csueastbay.edu) before choosing any of these courses.

Advanced Science Courses (40 units)

- BIOL 3121 - Principles of Genetics *Units: 5*
- BIOL 3122 - Principles of Developmental Genetic Analysis *Units: 4*
- BIOL 3151 - Principles of Animal Physiology *Units: 5*
- BIOL 3405 - Microbiology *Units: 6*
- BIOL 4510 - Neurobiology *Units: 4*
- CHEM 4411 - General Biochemistry *Units: 4*
- CHEM 4412 - General Biochemistry *Units: 4*
- CHEM 4413 - General Biochemistry *Units: 4*
- MATH 1305 - Calculus II *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

History, Asian and Middle Eastern History Option, B.A.

Program Description

Students who pursue work in History benefit in a variety of ways. Their studies afford them entree to the riches of the recorded past and understanding of the process of historical change. At the same time, a History major enables them to develop critical reading and writing skills which are valuable in life and in any employment field they choose to enter.

Student Learning Outcomes

Students graduating with a B.A. in History from Cal State East Bay will be able to:

1. know basic analytic concepts for assembling, organizing, and interpreting historical evidence, and achieve digital literacy in accessing and presenting historical materials;
2. demonstrate significant knowledge of major events and trends in their area of concentration;
3. write and speak clearly and persuasively about historical themes and topics, and work collaboratively with others in solving historical problems;
4. conduct historical research in primary sources, provide original interpretation of sources, and accurately reference all sources;
5. comprehend differences and similarities among diverse peoples and cultures over time and develop an historical perspective on social responsibility and sustainability.

Career Possibilities

- Archivist
- Attorney
- Corporate Historian
- Curator
- Diplomat/Foreign Service Officer
- Government Service
- International Relations Specialist
- Journalist
- Legal Assistant
- Librarian
- Museum Worker
- Professor
- Politician
- Public Administrator
- Researcher
- Teacher
- Writer

Features

The B.A. degree major in History requires 68 units in History, 24 at the lower division and 44 at the upper division level. Foundation courses (28 units) provide an introduction to the methods and purposes of historical study, historical writing, and surveys of world history and U.S. history. Option requirements (16 units) permit specialization in a particular area, while elective courses (16 units) provide additional breadth. Capstone courses in historiography and historical method acquaint students with the theory and history of historical study and provide opportunities for the student to engage in original historical research.

Preparation

Students planning to major in History should pay particular attention to the lower division requirements in the major: some of these may be satisfied before coming to Cal State East Bay.

Advanced Placement: Students who score a "3," "4," or "5" on the College Entrance Examination Board's Advanced Placement Test in European History will be granted 8 units of credit for HIST 1015 and HIST 1016 which count towards the lower division requirements in the History major. Students who earn a "3," "4," or "5" on the College Entrance Examination Board's Advanced Placement Test in U.S. History will receive 8 units of credit equivalent to HIST 1101 and HIST 1102. Credit will apply to the U.S. history and U.S. Constitution requirements for graduation, but not to the California state and local government requirement. An additional course is required to complete the California state and local government requirement.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 68 units; the B.A. degree requires a total of 180 units.

I. Core Curriculum (36 units)

A. Foundation Courses (28 units)

The following courses should be taken as early in the major as possible:

- HIST 1014 - World Civilizations I *Units: 4*
or
- HIST 1017 - Ancient World Civilizations *Units: 4*
- HIST 1015 - World Civilizations II *Units: 4*
- HIST 1016 - World Civilizations III *Units: 4*
- HIST 1101 - History of the United States to 1877 *Units: 4*
- HIST 1102 - History of the United States Since 1877 *Units: 4*
- HIST 2010 - Introduction to History *Units: 4*
- HIST 3010 - Historical Writing *Units: 4*

B. Capstone Courses (8 units)

The following courses should be taken in the student's final three quarters. All Foundation courses must be completed before enrollment in Capstone courses.

1. Historiography

- HIST 4030 - Historiography *Units: 4*

2. One from the following (4):

- HIST 4031 - Historical Research Methods *Units: 4*
- HIST 4032 - Introduction to Public History *Units: 4*

II. Option Requirements (16 units)

The Department of History offers several options for degree candidates. Majors should choose one of the following options: United States History, European History, Asian History, Latin American History, History of California and the American West. Students may also design a topical (e.g., women's history), geographic (e.g., Russian history), or period (e.g., ancient and medieval history) option of their own with the advance written approval of the department chair.

III. Electives (16 units)

Four upper division courses (16 units) in History. These must include at least one course from each of at least two different option areas outside the student's option. HIST 3400 may not be counted towards the major.

Asian and Middle Eastern History Option (16 units)

Four courses (16 units) from the following:

- HIST 3303 - Precolonial India *Units: 4*
- HIST 3305 - Modern South Asia *Units: 4*

- HIST 3307 - Modern India through Film *Units: 4*
- HIST 3311 - Traditional China *Units: 4*
- HIST 3312 - Modern China *Units: 4*
- HIST 3313 - People's Republic of China *Units: 4*
- HIST 3322 - Early Japan *Units: 4*
- HIST 3323 - Modern Japan *Units: 4*
- HIST 3325 - Postwar Japan *Units: 4*
- HIST 3340 - The Middle East and Rise of Islamic Societies *Units: 4*
- HIST 3345 - The Modern Middle East *Units: 4*
- HIST 3803 - Topics in Asian History *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

History, European History Option, B.A.

Program Description

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Student Learning Outcomes

Students graduating with a B.A. in History from Cal State East Bay will be able to:

1. know basic analytic concepts for assembling, organizing, and interpreting historical evidence, and achieve digital literacy in accessing and presenting historical materials;
2. demonstrate significant knowledge of major events and trends in their area of concentration;
3. write and speak clearly and persuasively about historical themes and topics, and work collaboratively with others in solving historical problems;
4. conduct historical research in primary sources, provide original interpretation of sources, and accurately reference all sources;
5. comprehend differences and similarities among diverse peoples and cultures over time and develop an historical perspective on social responsibility and sustainability.

Career Possibilities

- Archivist
- Attorney
- Corporate Historian
- Curator
- Diplomat/Foreign Service Officer
- Government Service
- International Relations Specialist
- Journalist
- Legal Assistant
- Librarian
- Museum Worker
- Professor

- Politician
- Public Administrator
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Features

The B.A. degree major in History requires 68 units in History, 24 at the lower division and 44 at the upper division level. Foundation courses (28 units) provide an introduction to the methods and purposes of historical study, historical writing, and surveys of world history and U.S. history. Option requirements (16 units) permit specialization in a particular area, while elective courses (16 units) provide additional breadth. Capstone courses in historiography and historical method acquaint students with the theory and history of historical study and provide opportunities for the student to engage in original historical research.

Preparation

Students planning to major in History should pay particular attention to the lower division requirements in the major: some of these may be satisfied before coming to Cal State East Bay.

Advanced Placement: Students who score a "3," "4," or "5" on the College Entrance Examination Board's Advanced Placement Test in European History will be granted 8 units of credit for HIST 1015 and HIST 1016 which count towards the lower division requirements in the History major. Students who earn a "3," "4," or "5" on the College Entrance Examination Board's Advanced Placement Test in U.S. History will receive 8 units of credit equivalent to HIST 1101 and HIST 1102. Credit will apply to the U.S. history and U.S. Constitution requirements for graduation, but not to the California state and local government requirement. An additional course is required to complete the California state and local government requirement.

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A. Foundation Courses (28 units)

The following courses should be taken as early in the major as possible:

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- HIST 1102 - History of the United States Since 1877 *Units: 4*
- HIST 2010 - Introduction to History *Units: 4*
- HIST 3010 - Historical Writing *Units: 4*

B. Capstone Courses (8 units)

The following courses should be taken in the student's final three quarters. All Foundation courses must be completed before enrollment in Capstone courses.

1. Historiography

- HIST 4030 - Historiography *Units: 4*

2. One from the following (4):

- HIST 4031 - Historical Research Methods *Units: 4*
- HIST 4032 - Introduction to Public History *Units: 4*

II. Option Requirements (16 units)

The Department of History offers several options for degree candidates. Majors should choose one of the following options: United States History, European History, Asian History, Latin American History, History of California and the American West. Students may also design a topical (e.g., women's history), geographic (e.g., Russian history), or period (e.g., ancient and medieval history) option of their own with the advance written approval of the department chair.

III. Electives (16 units)

Four upper division courses (16 units) in History. These must include at least one course from each of at least two different option areas outside the student's option. HIST 3400 may not be counted towards the major.

European History Option (16 units)

1. Two courses (8 units) from the following:

- HIST 3107 - History of Ancient Greece *Units: 4*
- HIST 3108 - History of Ancient Rome *Units: 4*
- HIST 3127 - Europe in the Early Middle Ages *Units: 4*
- HIST 3128 - Europe in the Later Middle Ages *Units: 4*
- HIST 3130 - Renaissance and Reformation Europe *Units: 4*
- HIST 3150 - Early Modern Europe, 1550-1789 *Units: 4*
- HIST 3160 - Europe in the 19th Century *Units: 4*

2. Two courses (8 units) from the following:

- HIST 3005 - Frankenstein: The Making of a Myth *Units: 4*
- HIST 3017 - The Twentieth Century *Units: 4*
- HIST 3114 - History of Early Christianity *Units: 4*
- HIST 3123 - History of Medieval Christianity *Units: 4*
- HIST 3125 - Women in Medieval and Early Modern Europe *Units: 4*
- HIST 3223 - History of the Soviet Union *Units: 4*
- HIST 3224 - The Cold War *Units: 4*
- HIST 3230 - Science and Medicine to 1700 *Units: 4*
- HIST 3801 - Topics in European History *Units: 4*

Other Degree Requirements

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History, History of California and the American West Option, B.A.

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I. Core Curriculum (36 units)

A. Foundation Courses (28 units)

The following courses should be taken as early in the major as possible:

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- HIST 1016 - World Civilizations III *Units: 4*
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- HIST 1102 - History of the United States Since 1877 *Units: 4*
- HIST 2010 - Introduction to History *Units: 4*
- HIST 3010 - Historical Writing *Units: 4*

B. Capstone Courses (8 units)

The following courses should be taken in the student's final three quarters. All Foundation courses must be completed before enrollment in Capstone courses.

1. Historiography

- HIST 4030 - Historiography *Units: 4*

2. One from the following (4):

- HIST 4031 - Historical Research Methods *Units: 4*
- HIST 4032 - Introduction to Public History *Units: 4*

II. Option Requirements (16 units)

The Department of History offers several options for degree candidates. Majors should choose one of the following options: United States History, European History, Asian History, Latin American History, History of California and the American West. Students may also design a topical (e.g., women's history), geographic (e.g., Russian history), or period (e.g., ancient and medieval history) option of their own with the advance written approval of the department chair.

III. Electives (16 units)

Four upper division courses (16 units) in History. These must include at least one course from each of at least two different option areas outside the student's option. HIST 3400 may not be counted towards the major.

History of California and the American West Option (16 units)

1. Two courses (8 units) from the following:

- HIST 3500 - History of California *Units: 4*
- HIST 3511 - The American West *Units: 4*

2. Two courses (8 units) from the following:

- HIST 3503 - History of the San Francisco Bay Area *Units: 4*
- HIST 3505 - California Environmental History *Units: 4*
- HIST 3515 - Mexican Americans and the West *Units: 4*
- HIST 3517 - The Immigrants' West *Units: 4*
- HIST 3530 - The Shaping of North America, 1492-1850 *Units: 4*
- HIST 3535 - American Indian History *Units: 4*
- HIST 3538 - American Indians in the 20th Century *Units: 4*
- HIST 4032 - Introduction to Public History *Units: 4*

Other Degree Requirements

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History, Latin American History Option, B.A.

Program Description

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4. conduct historical research in primary sources, provide original interpretation of sources, and accurately reference all sources;
5. comprehend differences and similarities among diverse peoples and cultures over time and develop an historical perspective on social responsibility and sustainability.

Career Possibilities

- Archivist

- Attorney
- Corporate Historian
- Curator
- Diplomat/Foreign Service Officer
- Government Service
- International Relations Specialist
- Journalist
- Legal Assistant
- Librarian
- Museum Worker
- Professor
- Politician
- Public Administrator
- Researcher
- Teacher
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Features

The B.A. degree major in History requires 68 units in History, 24 at the lower division and 44 at the upper division level. Foundation courses (28 units) provide an introduction to the methods and purposes of historical study, historical writing, and surveys of world history and U.S. history. Option requirements (16 units) permit specialization in a particular area, while elective courses (16 units) provide additional breadth. Capstone courses in historiography and historical method acquaint students with the theory and history of historical study and provide opportunities for the student to engage in original historical research.

Preparation

Students planning to major in History should pay particular attention to the lower division requirements in the major: some of these may be satisfied before coming to Cal State East Bay.

Advanced Placement: Students who score a "3," "4," or "5" on the College Entrance Examination Board's Advanced Placement Test in European History will be granted 8 units of credit for HIST 1015 and HIST 1016 which count towards the lower division requirements in the History major. Students who earn a "3," "4," or "5" on the College Entrance Examination Board's Advanced Placement Test in U.S. History will receive 8 units of credit equivalent to HIST 1101 and HIST 1102. Credit will apply to the U.S. history and U.S. Constitution requirements for graduation, but not to the California state and local government requirement. An additional course is required to complete the California state and local government requirement.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 68 units; the B.A. degree requires a total of 180 units.

I. Core Curriculum (36 units)

A. Foundation Courses (28 units)

The following courses should be taken as early in the major as possible:

- HIST 1014 - World Civilizations I *Units: 4*
or
- HIST 1017 - Ancient World Civilizations *Units: 4*
- HIST 1015 - World Civilizations II *Units: 4*

- HIST 1016 - World Civilizations III *Units: 4*
- HIST 1101 - History of the United States to 1877 *Units: 4*
- HIST 1102 - History of the United States Since 1877 *Units: 4*
- HIST 2010 - Introduction to History *Units: 4*
- HIST 3010 - Historical Writing *Units: 4*

B. Capstone Courses (8 units)

The following courses should be taken in the student's final three quarters. All Foundation courses must be completed before enrollment in Capstone courses.

1. Historiography

- HIST 4030 - Historiography *Units: 4*

2. One from the following (4):

- HIST 4031 - Historical Research Methods *Units: 4*
- HIST 4032 - Introduction to Public History *Units: 4*

II. Option Requirements (16 units)

The Department of History offers several options for degree candidates. Majors should choose one of the following options: United States History, European History, Asian History, Latin American History, History of California and the American West. Students may also design a topical (e.g., women's history), geographic (e.g., Russian history), or period (e.g., ancient and medieval history) option of their own with the advance written approval of the department chair.

III. Electives (16 units)

Four upper division courses (16 units) in History. These must include at least one course from each of at least two different option areas outside the student's option. HIST 3400 may not be counted towards the major.

Latin American History Option (16 units)

Four courses (16 units) from the following:

- HIST 3600 - Colonial Latin America *Units: 4*
- HIST 3605 - Modern Latin America *Units: 4*
- HIST 3622 - Mexico Since 1810 *Units: 4*
- HIST 3632 - Film and Society in Latin America *Units: 4*
- HIST 3804 - Topics in Latin American History *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

History, United States History Option, B.A.

Program Description

Students who pursue work in History benefit in a variety of ways. Their studies afford them entree to the riches of the recorded past and understanding of the process of historical change. At the same time, a History major enables them to develop critical reading and writing skills which are valuable in life and in any employment field they choose to enter.

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- Archivist
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- Diplomat/Foreign Service Officer
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- Legal Assistant
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Features

The B.A. degree major in History requires 68 units in History, 24 at the lower division and 44 at the upper division level. Foundation courses (28 units) provide an introduction to the methods and purposes of historical study, historical writing, and surveys of world history and U.S. history. Option requirements (16 units) permit specialization in a particular area, while elective courses (16 units) provide additional breadth. Capstone courses in historiography and historical method acquaint students with the theory and history of historical study and provide opportunities for the student to engage in original historical research.

Preparation

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credit equivalent to HIST 1101 and HIST 1102. Credit will apply to the U.S. history and U.S. Constitution requirements for graduation, but not to the California state and local government requirement. An additional course is required to complete the California state and local government requirement.

Major Requirements (B.A.)

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A. Foundation Courses (28 units)

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- HIST 1101 - History of the United States to 1877 *Units: 4*
- HIST 1102 - History of the United States Since 1877 *Units: 4*
- HIST 2010 - Introduction to History *Units: 4*
- HIST 3010 - Historical Writing *Units: 4*

B. Capstone Courses (8 units)

The following courses should be taken in the student's final three quarters. All Foundation courses must be completed before enrollment in Capstone courses.

1. Historiography

- HIST 4030 - Historiography *Units: 4*

2. One from the following (4):

- HIST 4031 - Historical Research Methods *Units: 4*
- HIST 4032 - Introduction to Public History *Units: 4*

II. Option Requirements (16 units)

The Department of History offers several options for degree candidates. Majors should choose one of the following options: United States History, European History, Asian History, Latin American History, History of California and the American West. Students may also design a topical (e.g., women's history), geographic (e.g., Russian history), or period (e.g., ancient and medieval history) option of their own with the advance written approval of the department chair.

III. Electives (16 units)

Four upper division courses (16 units) in History. These must include at least one course from each of at least two different option areas outside the student's option. HIST 3400 may not be counted towards the major.

United States History Option (16 units)

1. Two courses (8 units) from the following:

- HIST 3411 - Colonial America *Units: 4*
- HIST 3412 - The American Revolution *Units: 4*
- HIST 3413 - The New Republic *Units: 4*
- HIST 3414 - Civil War and Reconstruction *Units: 4*
- HIST 3415 - America in the Age of Empire *Units: 4*
- HIST 3416 - The Great Depression and World War II *Units: 4*
- HIST 3417 - Cold War America *Units: 4*

2. Two courses (8 units) from the following:

- HIST 3224 - The Cold War *Units: 4*
- HIST 3500 - History of California *Units: 4*
- HIST 3503 - History of the San Francisco Bay Area *Units: 4*
- HIST 3505 - California Environmental History *Units: 4*
- HIST 3511 - The American West *Units: 4*
- HIST 3515 - Mexican Americans and the West *Units: 4*
- HIST 3517 - The Immigrants' West *Units: 4*
- HIST 3530 - The Shaping of North America, 1492-1850 *Units: 4*
- HIST 3535 - American Indian History *Units: 4*
- HIST 3538 - American Indians in the 20th Century *Units: 4*
- HIST 3547 - The United States and Modern War *Units: 4*
- HIST 3550 - The History of U.S. Foreign Relations *Units: 4*
- HIST 3553 - Modern American Thought and Culture *Units: 4*
- HIST 3570 - The Family and Sexuality in American History *Units: 4*
- HIST 3571 - Women in American History *Units: 4*
- HIST 3572 - American Women in the Twentieth Century *Units: 4*
- HIST 3575 - Baseball in America *Units: 4*
- HIST 3802 - Topics in United States History *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Hospitality and Tourism, B.S.

Program Description

The Department of Hospitality, Recreation and Tourism prepares students to become professionals in our dynamic, growing and exciting industry. Travel and tourism has become available to more of the world's population and the demand for hospitality managers is exploding. A degree in Hospitality and Tourism provides our students with the knowledge they need about the industry, people, and management. Combined with work experience, this preparation will provide many opportunities in companies around the world. The industry is looking for smart, dedicated people to help lead their growth in this booming environment.

This program focuses on the people skills, problem solving skills, and creativity needed to be an excellent hospitality professional. Understanding why people are seeking "the good life" is critical to delivering superior services that bring the guest back for return visits. We want to instill that "can do attitude" employers are seeking. This major is great for anyone seeking a non-routine career that features variety, complexity and excitement.

This career provides opportunities to grow and improve your life while improving the experiences of the people you serve. Many jobs offer varied responsibilities where life is exciting, interesting and every day is different through meeting and serving people from all over the world. The Hospitality, Leisure, and Tourism sector is the world's largest employer and employment opportunities abound all over the globe.

Student Learning Outcomes

Students who graduate with a Hospitality and Tourism, B.S. will be able to:

1. Analyze and generate effective, sustainable solutions based on evidence and technology and provide relevant references.
2. Demonstrate significant knowledge of effective leadership and teamwork strategies, management skills, and evaluation of service quality and consumer needs through investigation and practical experience.
3. Articulate clearly (speak and write) ethical, philosophical, historical, and current practices and administrative foundations of the profession.
4. Demonstrate techniques that contribute to a culture of dignity and respect in the workplace.

Career Possibilities

- Food and Beverage Manager
- Convention Manager
- Guest Relations Manager
- Hospitality Sales and Marketing Manager
- Rooms Division Manager
- Front Desk Manager
- Executive Housekeeper
- Event Manager
- Meetings and Conference Manager
- Resort Manager
- Country Club Manager
- Foodservice Manager
- Cruise Ship Manager
- Conventions and Visitors Bureau
- Food Supplier
- Commercial Recreation Entrepreneur
- Eco Tourism Professional

Features

Our student-centered department has programs designed for both on campus and online students. Our courses are offered in three formats: hybrid (one day a week in-class instruction with the remainder online), all instruction online, or in-class instruction on the weekends and between quarters. We are dedicated to helping you realize your dreams even if you work full-time. Our friendly, accessible faculty will advise you so that you can meet all requirements in the most efficient manner. We have excellent industry contacts and can help connect you with professional part-time jobs to build your resume while in school. All our faculty have been Leisure and Hospitality industry professionals.

Major Requirements (B.S.)

Consult an advisor in your major department for clarification and interpretation of your major requirements at least three times a year. Students must complete 1000 hours of paid or volunteer experience before doing their internship. The major in Hospitality and Tourism consists of 98 units. The B.S. in Hospitality and Tourism requires 180 units.

Department Core Requirements (40 units)

- REC 1000 - Introduction to Recreation *Units: 4*
- HOS 1100 - Introduction to Hospitality and Tourism *Units: 4*
- REC 2050 - Computers in Hospitality, Recreation and Tourism *Units: 2*
- REC 3000 - Philosophy of Leisure *Units: 4*
- REC 3010 - Service Learning in Hospitality, Recreation and Tourism 2 *Units: 4*
- REC 3300 - Leadership in Hospitality, Recreation and Tourism *Units: 4*
- REC 3701 - Evaluation and Research in Hospitality, Recreation and Tourism *Units: 4*
- REC 4050 - Social Justice in Hospitality, Recreation and Tourism *Units: 4*
- REC 4100 - Professional Issues in Hospitality, Recreation and Tourism *Units: 2*
- REC 4501 - Special Events Management 1 *Units: 4*
- HOS 4502 - Special Events Management 2 *Units: 4*

Hospitality and Tourism Core Requirements (54 units)

- HOS 4505 - Hospitality Information Technology *Units: 4*
- HOS 4510 - Lodging Management *Units: 4*
- HOS 4520 - Promotion of Leisure and Hospitality *Units: 4*
- HOS 4530 - Principles of Meetings, Conventions and Special Events *Units: 4*
- HOS 4540 - Fiscal Leadership for Operational Managers *Units: 4*
- HOS 4560 - Food and Beverage Management *Units: 4*
- HOS 4570 - Dimensions in Tourism *Units: 4*
- HOS 4590 - Hospitality Law *Units: 4*
- HOS 4901 - Hospitality Internship Placement *Units: 2*
- HOS 4912 - Hospitality Internship and Senior Project *Units: 4-12*
- MKTG 3495 - Business Communication *Units: 4*
- REC 3510 - Management and Supervision in Hospitality, Recreation and Tourism *Units: 4*

Electives (4 units)

- HOS 3999 - Issues in Hospitality and Tourism *Units: 4 2*
- HOS 4550 - Global Tourism *Units: 4 2*
- ACCT 2701 - Legal Environment of Business *Units: 4*
- MGMT 3600 - Theories of Management *Units: 4*
- MGMT 3610 - Strategic Human Resources Management *Units: 4*
- MGMT 3614 - Organizational Behavior *Units: 4*
- MGMT 4500 - Business, Government, and Society *Units: 4*
- MKTG 3401 - Marketing Principles *Units: 4*
- PSYC 1000 - General Psychology *Units: 5*
- PSYC 3520 - Interpersonal Processes *Units: 4 1*
- PSYC 3540 - Groups and Organizations *Units: 4 1*
- PSYC 3550 - Social Influence and Change *Units: 4 1*
- REC 2100 - Leadership Principles in Action *Units: 4*
- REC 2500 - Service Learning in Leadership, Hospitality and Leisure 1 *Units: 1-4 2*
- REC 3200 - Wellness Through Leisure *Units: 4 2*
- REC 3202 - Women and Leisure *Units: 4 2*
- REC 3305 - Outdoor Living Skills *Units: 4 2*
- REC 3401 - Leadership of Small Groups *Units: 4 2*
- REC 3999 - Issues in Hospitality and Leisure Services *Units: 1-4 2*
- REC 4900 - Independent Study *Units: 1-4 2*

Footnotes

1. Prerequisite PSYC 1000.
2. Course offered online.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Human Development, Adolescent Development Option, B.A.

Program Description

Human Development is an interdisciplinary program that integrates theory and methodology from disciplines such as anthropology, biology, linguistics, psychology, and sociology. The program explores the processes and mechanisms underlying developmental change and stability across the lifespan and the socio-cultural and historical contexts in which development takes place.

The Program's curriculum aims to develop in students a basic understanding of major research findings and core concepts in human development, the ability to analyze and evaluate theoretical and practical issues in the field, and the skills to apply learning to diverse communities outside the University. The Program strives to create an optimal learning community that values and fosters collaborative learning and dialogue between and among students and faculty from diverse backgrounds.

Student Learning Outcomes

Students graduating with a B.A. in Human Development from will be able to:

1. Demonstrate core knowledge in biological, psychological, and social aspects of human development;
2. Demonstrate critical thinking ability to identify similarities, differences, and connections among human development perspectives;
3. Thoughtfully reflect on the application of human development knowledge and skills to settings outside the university. Students should additionally be able to apply their knowledge and skills to new and diverse situations outside the university;
4. Access information, design and carry out individual and group research projects, and present them clearly, logically and persuasively;
5. Show ability to understand themselves reflectively and others empathetically and apply these skills to both academic and nonacademic contexts.

Career Opportunities

The interdisciplinary approach of the Human Development Program provides students with excellent preparation for graduate study in a wide range of disciplines, including anthropology, education, social work, sociology, medicine, public administration, law, criminal justice, psychology, and counseling. It also prepares students to work with people of all age groups from diverse racial, cultural, ethnic, socioeconomic, religious backgrounds, and sexual orientations. Students majoring in Human Development find a variety of career options in areas such as education, social work, health care, counseling, law and law enforcement, and human resource and organizational work in community or corporate settings.

Features

Human Development faculty members come from a wide range of academic disciplines, including anthropology, biology, human development, linguistics, neuropsychology, psychology, and sociology.

Students select one of five Options: Early Childhood Development, Childhood Development, Adolescent Development, Adult Development and Gerontology, or Women's Development.

Minors in Human Development and Women's Studies (please see Women's Studies Minor) are also offered.

Students have the opportunity to pursue internships that integrate academic learning and field experience, and promote the development of professional activities. Internships are graded Credit/No Credit only and may be repeated for credit.

As part of its commitment to educational access, the Program incorporates a broad range of educational formats, including online classes, hybrid classes that combine an online component with face-to-face interaction, and face-to-face lecture/discussion and seminar classes.

The major is offered at both the Hayward and Concord campuses.

The program also offers its major through P.A.C.E. (Program for Accelerated College Education). Please contact the P.A.C.E. office for further information.

Major Requirements (B.A.)

The major consists of 80 units; the B.A. degree in Human Development requires a total of 180 units.

I. Lower Division (12 units)

Select three 4-unit courses from the following categories, with no more than one course from each category.

- A. Anthropology (cultural or social)
- B. Psychology
- C. Sociology
- D. Human biology or physical anthropology
- E. Human or child development
- F. Ethnic or area studies
- G. Additional categories (e.g., statistics, gerontology, developmental disabilities) may be approved by the department

II. Upper Division (68 units)

A. Junior Foundation Courses (24 units)

(Prerequisite: Upper Division Standing)

- HDEV 3101 - Lifespan Physical and Cognitive Development *Units: 4*
- HDEV 3102 - Lifespan Social and Emotional Development *Units: 4*
- HDEV 3103 - Social and Cultural Dynamics of Human Development *Units: 4*
- HDEV 3201 - Theories of Human Development *Units: 4*
- HDEV 3202 - Research Methods in Human Development *Units: 4*
- HDEV 3203 - Applying Theory and Methods of Human Development *Units: 4*

B. Lifespan Survey Courses (16 units)

(Prerequisite: Upper Division Standing)

- HDEV 3301 - Child Development *Units: 4*
- HDEV 3302 - Foundational Aspects of Adolescent Development *Units: 4*
- HDEV 3303 - Adult Development and Aging *Units: 4*
- HDEV 3304 - Girls and Women Across the Lifespan *Units: 4*

C. Senior Option Courses (20 units)

(Prerequisite: Upper Division Standing)

Choose one of the following five Options:

D. Senior Capstone Courses (8 units)

(Prerequisite: Completion of all HDEV Junior Foundation Courses, plus 16 additional upper division HDEV units.)
(Students must enroll in two consecutive quarters for these two courses.)

- HDEV 4811 - Senior Research Seminar in Human Development I *Units: 4*
- HDEV 4812 - Senior Research Seminar in Human Development II *Units: 4*

Adolescent Development Option (20 units)

The Adolescent Development Option covers the teenage years. It consists of 20 units of required and elective courses that focus on issues arising during the pre-pubescent to pre-adult years from biological, psychological, and social perspectives.

Select 20 units from the following

with at least 16 units of courses with the HDEV prefix:

- HDEV 3800 - Human Development and Interaction *Units: 4*
- HDEV 4150 - Children in Families and Communities *Units: 4*
- HDEV 4220 - Contemporary Research Topics in Adolescent Development *Units: 4*
- HDEV 4230 - Prevention and Intervention in Adolescent Development *Units: 4*
- HDEV 4430 - Intimate Relationships Throughout the Lifespan *Units: 4*
- HDEV 4440 - Lesbian and Gay Lifespan Development *Units: 4*
- HDEV 4450 - Human Development and Conflict in Contemporary Society *Units: 4*
- WOST 3520 - Mothers, Daughters, and Sons *Units: 4*
- WOST 3530 - Women and Their Bodies *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Human Development, Adult Development and Gerontology Online Option, B.A.

Program Description

Human Development is an interdisciplinary program that integrates theory and methodology from disciplines such as anthropology, biology, linguistics, psychology, and sociology. The program explores the processes and mechanisms underlying developmental change and stability across the lifespan and the socio-cultural and historical contexts in which development takes place.

The Program's curriculum aims to develop in students a basic understanding of major research findings and core concepts in human development, the ability to analyze and evaluate theoretical and practical issues in the field, and the skills to apply learning to diverse communities outside the University. The Program strives to create an optimal learning community that values and fosters collaborative learning and dialogue between and among students and faculty from diverse backgrounds.

Student Learning Outcomes

Students graduating with a B.A. in Human Development from will be able to:

1. Demonstrate core knowledge in biological, psychological, and social aspects of human development;
2. Demonstrate critical thinking ability to identify similarities, differences, and connections among human development perspectives;
3. Thoughtfully reflect on the application of human development knowledge and skills to settings outside the university. Students should additionally be able to apply their knowledge and skills to new and diverse situations outside the university;

4. Access information, design and carry out individual and group research projects, and present them clearly, logically and persuasively;
5. Show ability to understand themselves reflectively and others empathetically and apply these skills to both academic and nonacademic contexts.

Career Opportunities

The interdisciplinary approach of the Human Development Program provides students with excellent preparation for graduate study in a wide range of disciplines, including anthropology, education, social work, sociology, medicine, public administration, law, criminal justice, psychology, and counseling. It also prepares students to work with people of all age groups from diverse racial, cultural, ethnic, socioeconomic, religious backgrounds, and sexual orientations. Students majoring in Human Development find a variety of career options in areas such as education, social work, health care, counseling, law and law enforcement, and human resource and organizational work in community or corporate settings.

Features

Human Development faculty members come from a wide range of academic disciplines, including anthropology, biology, human development, linguistics, neuropsychology, psychology, and sociology.

Students select one of five Options: Early Childhood Development, Childhood Development, Adolescent Development, Adult Development and Gerontology, or Women's Development.

Minors in Human Development and Women's Studies (please see Women's Studies Minor) are also offered.

Students have the opportunity to pursue internships that integrate academic learning and field experience, and promote the development of professional activities. Internships are graded Credit/No Credit only and may be repeated for credit.

As part of its commitment to educational access, the Program incorporates a broad range of educational formats, including online classes, hybrid classes that combine an online component with face-to-face interaction, and face-to-face lecture/discussion and seminar classes.

The major is offered at both the Hayward and Concord campuses.

The program also offers its major through P.A.C.E. (Program for Accelerated College Education). Please contact the P.A.C.E. office for further information.

Online Degree Programs

The On-line Human Development Degree Program for entering third year students is identical to the existing Human Development Program, with the exception that the degree is attained entirely on-line. Students participating in the On-line Degree Program may choose from three options: Early Childhood Development, Adult Development and Gerontology, and Women's Development.

The Online major consists of 80 units; the B.A. degree requires a total of 180 units, which includes 12 lower-division units from among three different categories.

II. Upper Division (68 units)

A. Junior Foundation Online Courses (24 units)

(Prerequisite: Upper Division Standing)

- HDEV 3101 - Lifespan Physical and Cognitive Development *Units: 4*
- HDEV 3102 - Lifespan Social and Emotional Development *Units: 4*
- HDEV 3103 - Social and Cultural Dynamics of Human Development *Units: 4*
- HDEV 3201 - Theories of Human Development *Units: 4*
- HDEV 3202 - Research Methods in Human Development *Units: 4*
- HDEV 3203 - Applying Theory and Methods of Human Development *Units: 4*

B. Lifespan Survey Online Courses (16 units)

(Prerequisite: Upper Division Standing)

- HDEV 3301 - Child Development *Units: 4*
- HDEV 3302 - Foundational Aspects of Adolescent Development *Units: 4*
- HDEV 3303 - Adult Development and Aging *Units: 4*
- HDEV 3304 - Girls and Women Across the Lifespan *Units: 4*

C. Senior Option Courses (20 units)

(Prerequisite: Upper Division Standing)

Choose ONE of the following two online Options:

D. Senior Capstone Courses (8 units)

(Prerequisite: Completion of all HDEV Junior Foundation Courses, plus 16 additional upper division HDEV units.)

(Students must enroll in two consecutive quarters for these two courses.)

- HDEV 4811 - Senior Research Seminar in Human Development I *Units: 4*
- HDEV 4812 - Senior Research Seminar in Human Development II *Units: 4*

Adult Development and Gerontology Online Option (20 units)

The Online Adult Development and Gerontology Option consists of 20 units of required and elective courses that focus on biological, psychological, and social aspects of early, middle, and late adulthood. By choosing from the elective courses, students may decide to focus on adulthood, or aging, or both.

Select 20 units from the following

with at least 16 units of courses with the HDEV prefix:

- HDEV 3600 - Development of Religious and Secular World Views *Units: 4*
- HDEV 4310 - Human Development in the Changing Workplace *Units: 4*
- HDEV 4361 - Current Issues in Aging *Units: 4*
- HDEV 4362 - Aging and Diversity *Units: 4*
- HDEV 4363 - Cognitive Aging *Units: 4*
- HDEV 4430 - Intimate Relationships Throughout the Lifespan *Units: 4*
- HDEV 4440 - Lesbian and Gay Lifespan Development *Units: 4*
- WOST 3400 - Women and Careers *Units: 4*
- WOST 3530 - Women and Their Bodies *Units: 4*
- WOST 3545 - Women's Health and Health Care *Units: 4*
- WOST 3550 - Women, Work, and Family Life *Units: 4*
- WOST 4130 - Women in Midlife Transition *Units: 4*
- WOST 4160 - Women and Aging *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Human Development, Adult Development and Gerontology Option, B.A.

Program Description

Human Development is an interdisciplinary program that integrates theory and methodology from disciplines such as anthropology, biology, linguistics, psychology, and sociology. The program explores the processes and mechanisms underlying developmental change and stability across the lifespan and the socio-cultural and historical contexts in which development takes place.

The Program's curriculum aims to develop in students a basic understanding of major research findings and core concepts in human development, the ability to analyze and evaluate theoretical and practical issues in the field, and the skills to apply learning to diverse communities outside the University. The Program strives to create an optimal learning community that values and fosters collaborative learning and dialogue between and among students and faculty from diverse backgrounds.

Student Learning Outcomes

Students graduating with a B.A. in Human Development from will be able to:

1. Demonstrate core knowledge in biological, psychological, and social aspects of human development;
2. Demonstrate critical thinking ability to identify similarities, differences, and connections among human development perspectives;
3. Thoughtfully reflect on the application of human development knowledge and skills to settings outside the university. Students should additionally be able to apply their knowledge and skills to new and diverse situations outside the university;
4. Access information, design and carry out individual and group research projects, and present them clearly, logically and persuasively;
5. Show ability to understand themselves reflectively and others empathetically and apply these skills to both academic and nonacademic contexts.

Career Opportunities

The interdisciplinary approach of the Human Development Program provides students with excellent preparation for graduate study in a wide range of disciplines, including anthropology, education, social work, sociology, medicine, public administration, law, criminal justice, psychology, and counseling. It also prepares students to work with people of all age groups from diverse racial, cultural, ethnic, socioeconomic, religious backgrounds, and sexual orientations. Students majoring in Human Development find a variety of career options in areas such as education, social work, health care, counseling, law and law enforcement, and human resource and organizational work in community or corporate settings.

Features

Human Development faculty members come from a wide range of academic disciplines, including anthropology, biology, human development, linguistics, neuropsychology, psychology, and sociology.

Students select one of five Options: Early Childhood Development, Childhood Development, Adolescent Development, Adult Development and Gerontology, or Women's Development.

Minors in Human Development and Women's Studies (please see Women's Studies Minor) are also offered.

Students have the opportunity to pursue internships that integrate academic learning and field experience, and promote the development of professional activities. Internships are graded Credit/No Credit only and may be repeated for credit.

As part of its commitment to educational access, the Program incorporates a broad range of educational formats, including online classes, hybrid classes that combine an online component with face-to-face interaction, and face-to-face lecture/discussion and seminar classes.

The major is offered at both the Hayward and Concord campuses.

The program also offers its major through P.A.C.E. (Program for Accelerated College Education). Please contact the P.A.C.E. office for further information.

Major Requirements (B.A.)

The major consists of 80 units; the B.A. degree in Human Development requires a total of 180 units.

I. Lower Division (12 units)

Select three 4-unit courses from the following categories, with no more than one course from each category.

- A. Anthropology (cultural or social)
- B. Psychology
- C. Sociology
- D. Human biology or physical anthropology
- E. Human or child development
- F. Ethnic or area studies
- G. Additional categories (e.g., statistics, gerontology, developmental disabilities) may be approved by the department

II. Upper Division (68 units)

A. Junior Foundation Courses (24 units)

(Prerequisite: Upper Division Standing)

- HDEV 3101 - Lifespan Physical and Cognitive Development *Units: 4*
- HDEV 3102 - Lifespan Social and Emotional Development *Units: 4*
- HDEV 3103 - Social and Cultural Dynamics of Human Development *Units: 4*
- HDEV 3201 - Theories of Human Development *Units: 4*
- HDEV 3202 - Research Methods in Human Development *Units: 4*
- HDEV 3203 - Applying Theory and Methods of Human Development *Units: 4*

B. Lifespan Survey Courses (16 units)

(Prerequisite: Upper Division Standing)

- HDEV 3301 - Child Development *Units: 4*
- HDEV 3302 - Foundational Aspects of Adolescent Development *Units: 4*
- HDEV 3303 - Adult Development and Aging *Units: 4*
- HDEV 3304 - Girls and Women Across the Lifespan *Units: 4*

C. Senior Option Courses (20 units)

(Prerequisite: Upper Division Standing)

Choose one of the following five Options:

D. Senior Capstone Courses (8 units)

(Prerequisite: Completion of all HDEV Junior Foundation Courses, plus 16 additional upper division HDEV units.)

(Students must enroll in two consecutive quarters for these two courses.)

- HDEV 4811 - Senior Research Seminar in Human Development I *Units: 4*
- HDEV 4812 - Senior Research Seminar in Human Development II *Units: 4*

Adult Development and Gerontology Option (20 units)

The Adult Development and Gerontology Option consists of 20 units of required and elective courses that focus on early, middle, and late adulthood from biological, psychological, and social perspectives. By choosing from the elective courses, students may decide to focus on adulthood, or aging, or both.

Select 20 units from the following

with at least 16 units of courses with the HDEV prefix:

- HDEV 3600 - Development of Religious and Secular World Views *Units: 4*
- HDEV 4310 - Human Development in the Changing Workplace *Units: 4*
- HDEV 4361 - Current Issues in Aging *Units: 4*
- HDEV 4362 - Aging and Diversity *Units: 4*
- HDEV 4363 - Cognitive Aging *Units: 4*
- HDEV 4430 - Intimate Relationships Throughout the Lifespan *Units: 4*
- HDEV 4440 - Lesbian and Gay Lifespan Development *Units: 4*
- HDEV 4450 - Human Development and Conflict in Contemporary Society *Units: 4*
- WOST 3400 - Women and Careers *Units: 4*
- WOST 3530 - Women and Their Bodies *Units: 4*
- WOST 3545 - Women's Health and Health Care *Units: 4*
- WOST 3550 - Women, Work, and Family Life *Units: 4*
- WOST 4130 - Women in Midlife Transition *Units: 4*
- WOST 4160 - Women and Aging *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Human Development, Childhood Development Option, B.A.

Program Description

Human Development is an interdisciplinary program that integrates theory and methodology from disciplines such as anthropology, biology, linguistics, psychology, and sociology. The program explores the processes and mechanisms underlying developmental change and stability across the lifespan and the socio-cultural and historical contexts in which development takes place.

The Program's curriculum aims to develop in students a basic understanding of major research findings and core concepts in human development, the ability to analyze and evaluate theoretical and practical issues in the field, and the skills to apply learning to diverse communities outside the University. The Program strives to create an optimal learning community that values and fosters collaborative learning and dialogue between and among students and faculty from diverse backgrounds.

Student Learning Outcomes

Students graduating with a B.A. in Human Development from will be able to:

1. Demonstrate core knowledge in biological, psychological, and social aspects of human development;
2. Demonstrate critical thinking ability to identify similarities, differences, and connections among human development perspectives;
3. Thoughtfully reflect on the application of human development knowledge and skills to settings outside the university. Students should additionally be able to apply their knowledge and skills to new and diverse situations outside the university;
4. Access information, design and carry out individual and group research projects, and present them clearly, logically and persuasively;
5. Show ability to understand themselves reflectively and others empathetically and apply these skills to both academic and nonacademic contexts.

Career Opportunities

The interdisciplinary approach of the Human Development Program provides students with excellent preparation for graduate study in a wide range of disciplines, including anthropology, education, social work, sociology, medicine, public administration, law, criminal justice, psychology, and counseling. It also prepares students to work with people of all age groups from diverse racial, cultural, ethnic, socioeconomic, religious backgrounds, and sexual orientations. Students majoring in Human Development find a variety of career options in areas such as education, social work, health care, counseling, law and law enforcement, and human resource and organizational work in community or corporate settings.

Features

Human Development faculty members come from a wide range of academic disciplines, including anthropology, biology, human development, linguistics, neuropsychology, psychology, and sociology.

Students select one of five Options: Early Childhood Development, Childhood Development, Adolescent Development, Adult Development and Gerontology, or Women's Development.

Minors in Human Development and Women's Studies (please see Women's Studies Minor) are also offered.

Students have the opportunity to pursue internships that integrate academic learning and field experience, and promote the development of professional activities. Internships are graded Credit/No Credit only and may be repeated for credit.

As part of its commitment to educational access, the Program incorporates a broad range of educational formats, including online classes, hybrid classes that combine an online component with face-to-face interaction, and face-to-face lecture/discussion and seminar classes.

The major is offered at both the Hayward and Concord campuses.

The program also offers its major through P.A.C.E. (Program for Accelerated College Education). Please contact the P.A.C.E. office for further information.

Major Requirements (B.A.)

The major consists of 80 units; the B.A. degree in Human Development requires a total of 180 units.

I. Lower Division (12 units)

Select three 4-unit courses from the following categories, with no more than one course from each category.

- A. Anthropology (cultural or social)
- B. Psychology
- C. Sociology
- D. Human biology or physical anthropology
- E. Human or child development
- F. Ethnic or area studies
- G. Additional categories (e.g., statistics, gerontology, developmental disabilities) may be approved by the department

II. Upper Division (68 units)

A. Junior Foundation Courses (24 units)

(Prerequisite: Upper Division Standing)

- HDEV 3101 - Lifespan Physical and Cognitive Development *Units: 4*
- HDEV 3102 - Lifespan Social and Emotional Development *Units: 4*
- HDEV 3103 - Social and Cultural Dynamics of Human Development *Units: 4*
- HDEV 3201 - Theories of Human Development *Units: 4*
- HDEV 3202 - Research Methods in Human Development *Units: 4*
- HDEV 3203 - Applying Theory and Methods of Human Development *Units: 4*

B. Lifespan Survey Courses (16 units)

(Prerequisite: Upper Division Standing)

- HDEV 3301 - Child Development *Units: 4*
- HDEV 3302 - Foundational Aspects of Adolescent Development *Units: 4*

- HDEV 3303 - Adult Development and Aging *Units: 4*
- HDEV 3304 - Girls and Women Across the Lifespan *Units: 4*

C. Senior Option Courses (20 units)

(Prerequisite: Upper Division Standing)

Choose one of the following five Options:

D. Senior Capstone Courses (8 units)

(Prerequisite: Completion of all HDEV Junior Foundation Courses, plus 16 additional upper division HDEV units.)

(Students must enroll in two consecutive quarters for these two courses.)

- HDEV 4811 - Senior Research Seminar in Human Development I *Units: 4*
- HDEV 4812 - Senior Research Seminar in Human Development II *Units: 4*

Childhood Development Option (20 units)

The Childhood Development Option covers the years from birth to age 12. It consists of 20 units of required and elective courses that focus on infancy to early adolescence from biological, psychological, and social perspectives.

Required Courses (8 units)

- HDEV 4140 - Theories of Childhood *Units: 4*
- HDEV 4150 - Children in Families and Communities *Units: 4*

Elective Courses (12 units)

Select 12 units from the following:

- HDEV 4110 - Child Cognitive Development *Units: 4*
- HDEV 4120 - Child Language Development *Units: 4*
- HDEV 4130 - The Social Development of Children *Units: 4*
- HDEV 4450 - Human Development and Conflict in Contemporary Society *Units: 4*
- WOST 3520 - Mothers, Daughters, and Sons *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Human Development, Early Childhood Development Online Option, B.A.

Program Description

Human Development is an interdisciplinary program that integrates theory and methodology from disciplines such as anthropology, biology, linguistics, psychology, and sociology. The program explores the processes and mechanisms underlying developmental change and stability across the lifespan and the socio-cultural and historical contexts in which development takes place.

The Program's curriculum aims to develop in students a basic understanding of major research findings and core concepts in human development, the ability to analyze and evaluate theoretical and practical issues in the field, and the skills to apply learning to diverse communities outside the University. The Program strives to create an optimal learning community that values and fosters collaborative learning and dialogue between and among students and faculty from diverse backgrounds.

Student Learning Outcomes

Students graduating with a B.A. in Human Development from will be able to:

1. Demonstrate core knowledge in biological, psychological, and social aspects of human development;
2. Demonstrate critical thinking ability to identify similarities, differences, and connections among human development perspectives;
3. Thoughtfully reflect on the application of human development knowledge and skills to settings outside the university. Students should additionally be able to apply their knowledge and skills to new and diverse situations outside the university;
4. Access information, design and carry out individual and group research projects, and present them clearly, logically and persuasively;
5. Show ability to understand themselves reflectively and others empathetically and apply these skills to both academic and nonacademic contexts.

Career Opportunities

The interdisciplinary approach of the Human Development Program provides students with excellent preparation for graduate study in a wide range of disciplines, including anthropology, education, social work, sociology, medicine, public administration, law, criminal justice, psychology, and counseling. It also prepares students to work with people of all age groups from diverse racial, cultural, ethnic, socioeconomic, religious backgrounds, and sexual orientations. Students majoring in Human Development find a variety of career options in areas such as education, social work, health care, counseling, law and law enforcement, and human resource and organizational work in community or corporate settings.

Features

Human Development faculty members come from a wide range of academic disciplines, including anthropology, biology, human development, linguistics, neuropsychology, psychology, and sociology.

Students select one of five Options: Early Childhood Development, Childhood Development, Adolescent Development, Adult Development and Gerontology, or Women's Development.

Minors in Human Development and Women's Studies (please see Women's Studies Minor) are also offered.

Students have the opportunity to pursue internships that integrate academic learning and field experience, and promote the development of professional activities. Internships are graded Credit/No Credit only and may be repeated for credit.

As part of its commitment to educational access, the Program incorporates a broad range of educational formats, including online classes, hybrid classes that combine an online component with face-to-face interaction, and face-to-face lecture/discussion and seminar classes.

The major is offered at both the Hayward and Concord campuses.

The program also offers its major through P.A.C.E. (Program for Accelerated College Education). Please contact the P.A.C.E. office for further information.

Online Degree Programs

The On-line Human Development Degree Program for entering third year students is identical to the existing Human Development Program, with the exception that the degree is attained entirely on-line. Students participating in the On-line Degree Program may choose from three options: Early Childhood Development, Adult Development and Gerontology, and Women's Development.

The Online major consists of 80 units; the B.A. degree requires a total of 180 units, which includes 12 lower-division units from among three different categories.

II. Upper Division (68 units)

A. Junior Foundation Online Courses (24 units)

(Prerequisite: Upper Division Standing)

- HDEV 3101 - Lifespan Physical and Cognitive Development *Units: 4*
- HDEV 3102 - Lifespan Social and Emotional Development *Units: 4*
- HDEV 3103 - Social and Cultural Dynamics of Human Development *Units: 4*
- HDEV 3201 - Theories of Human Development *Units: 4*
- HDEV 3202 - Research Methods in Human Development *Units: 4*
- HDEV 3203 - Applying Theory and Methods of Human Development *Units: 4*

B. Lifespan Survey Online Courses (16 units)

(Prerequisite: Upper Division Standing)

- HDEV 3301 - Child Development *Units: 4*
- HDEV 3302 - Foundational Aspects of Adolescent Development *Units: 4*
- HDEV 3303 - Adult Development and Aging *Units: 4*
- HDEV 3304 - Girls and Women Across the Lifespan *Units: 4*

C. Senior Option Courses (20 units)

(Prerequisite: Upper Division Standing)

Choose ONE of the following two online Options:

D. Senior Capstone Courses (8 units)

(Prerequisite: Completion of all HDEV Junior Foundation Courses, plus 16 additional upper division HDEV units.)
(Students must enroll in two consecutive quarters for these two courses.)

- HDEV 4811 - Senior Research Seminar in Human Development I *Units: 4*
- HDEV 4812 - Senior Research Seminar in Human Development II *Units: 4*

Early Childhood Development Option (20 units)

The Early Childhood Development Option covers the years from birth to age 5. It consists of 20 units of required and elective courses that focus on infancy to preschool years from biological, psychological, and social perspectives.

Required Courses (16 units)

- HDEV 4010 - Early Childhood Cognitive Development *Units: 4*
- HDEV 4030 - Early Childhood Social Development *Units: 4*
- HDEV 4140 - Theories of Childhood *Units: 4*
- HDEV 4150 - Children in Families and Communities *Units: 4*

Elective Courses (4 units)

Select 4 units from the following:

- HDEV 4120 - Child Language Development *Units: 4*
- TED 4070 - Early Childhood Education: Language and Literacy Development *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Human Development, Early Childhood Development Option, B.A.

Program Description

Human Development is an interdisciplinary program that integrates theory and methodology from disciplines such as anthropology, biology, linguistics, psychology, and sociology. The program explores the processes and mechanisms underlying developmental change and stability across the lifespan and the socio-cultural and historical contexts in which development takes place.

The Program's curriculum aims to develop in students a basic understanding of major research findings and core concepts in human development, the ability to analyze and evaluate theoretical and practical issues in the field, and the skills to apply learning to diverse communities outside the University. The Program strives to create an optimal learning community that values and fosters collaborative learning and dialogue between and among students and faculty from diverse backgrounds.

Student Learning Outcomes

Students graduating with a B.A. in Human Development from will be able to:

1. Demonstrate core knowledge in biological, psychological, and social aspects of human development;
2. Demonstrate critical thinking ability to identify similarities, differences, and connections among human development perspectives;
3. Thoughtfully reflect on the application of human development knowledge and skills to settings outside the university. Students should additionally be able to apply their knowledge and skills to new and diverse situations outside the university;
4. Access information, design and carry out individual and group research projects, and present them clearly, logically and persuasively;
5. Show ability to understand themselves reflectively and others empathetically and apply these skills to both academic and nonacademic contexts.

Career Opportunities

The interdisciplinary approach of the Human Development Program provides students with excellent preparation for graduate study in a wide range of disciplines, including anthropology, education, social work, sociology, medicine, public administration, law, criminal justice, psychology, and counseling. It also prepares students to work with people of all age groups from diverse racial, cultural, ethnic, socioeconomic, religious backgrounds, and sexual orientations. Students majoring in Human Development find a variety of career options in areas such as education, social work, health care, counseling, law and law enforcement, and human resource and organizational work in community or corporate settings.

Features

Human Development faculty members come from a wide range of academic disciplines, including anthropology, biology, human development, linguistics, neuropsychology, psychology, and sociology.

Students select one of five Options: Early Childhood Development, Childhood Development, Adolescent Development, Adult Development and Gerontology, or Women's Development.

Minors in Human Development and Women's Studies (please see Women's Studies Minor) are also offered.

Students have the opportunity to pursue internships that integrate academic learning and field experience, and promote the development of professional activities. Internships are graded Credit/No Credit only and may be repeated for credit.

As part of its commitment to educational access, the Program incorporates a broad range of educational formats, including online classes, hybrid classes that combine an online component with face-to-face interaction, and face-to-face lecture/discussion and seminar classes.

The major is offered at both the Hayward and Concord campuses.

The program also offers its major through P.A.C.E. (Program for Accelerated College Education). Please contact the P.A.C.E. office for further information.

Major Requirements (B.A.)

The major consists of 80 units; the B.A. degree in Human Development requires a total of 180 units.

I. Lower Division (12 units)

Select three 4-unit courses from the following categories, with no more than one course from each category.

- A. Anthropology (cultural or social)
- B. Psychology
- C. Sociology
- D. Human biology or physical anthropology
- E. Human or child development
- F. Ethnic or area studies
- G. Additional categories (e.g., statistics, gerontology, developmental disabilities) may be approved by the department

II. Upper Division (68 units)

A. Junior Foundation Courses (24 units)

(Prerequisite: Upper Division Standing)

- HDEV 3101 - Lifespan Physical and Cognitive Development *Units: 4*
- HDEV 3102 - Lifespan Social and Emotional Development *Units: 4*
- HDEV 3103 - Social and Cultural Dynamics of Human Development *Units: 4*
- HDEV 3201 - Theories of Human Development *Units: 4*
- HDEV 3202 - Research Methods in Human Development *Units: 4*
- HDEV 3203 - Applying Theory and Methods of Human Development *Units: 4*

B. Lifespan Survey Courses (16 units)

(Prerequisite: Upper Division Standing)

- HDEV 3301 - Child Development *Units: 4*
- HDEV 3302 - Foundational Aspects of Adolescent Development *Units: 4*
- HDEV 3303 - Adult Development and Aging *Units: 4*
- HDEV 3304 - Girls and Women Across the Lifespan *Units: 4*

C. Senior Option Courses (20 units)

(Prerequisite: Upper Division Standing)

Choose one of the following five Options:

D. Senior Capstone Courses (8 units)

(Prerequisite: Completion of all HDEV Junior Foundation Courses, plus 16 additional upper division HDEV units.)
(Students must enroll in two consecutive quarters for these two courses.)

- HDEV 4811 - Senior Research Seminar in Human Development I *Units: 4*
- HDEV 4812 - Senior Research Seminar in Human Development II *Units: 4*

Early Childhood Development Option (20 units)

The Early Childhood Development Option covers the years from birth to age 5. It consists of 20 units of required and elective courses that focus on infancy to preschool years from biological, psychological, and social perspectives.

Required Courses (16 units)

- HDEV 4010 - Early Childhood Cognitive Development *Units: 4*
- HDEV 4030 - Early Childhood Social Development *Units: 4*
- HDEV 4140 - Theories of Childhood *Units: 4*
- HDEV 4150 - Children in Families and Communities *Units: 4*

Elective Courses (4 units)

Select 4 units from the following:

- HDEV 4120 - Child Language Development *Units: 4*
- TED 4070 - Early Childhood Education: Language and Literacy Development *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Human Development, Women's Development Online Option, B.A.

Program Description

Human Development is an interdisciplinary program that integrates theory and methodology from disciplines such as anthropology, biology, linguistics, psychology, and sociology. The program explores the processes and mechanisms underlying developmental change and stability across the lifespan and the socio-cultural and historical contexts in which development takes place.

The Program's curriculum aims to develop in students a basic understanding of major research findings and core concepts in human development, the ability to analyze and evaluate theoretical and practical issues in the field, and the skills to apply learning to diverse communities outside the University. The Program strives to create an optimal learning community that values and fosters collaborative learning and dialogue between and among students and faculty from diverse backgrounds.

Student Learning Outcomes

Students graduating with a B.A. in Human Development from will be able to:

1. Demonstrate core knowledge in biological, psychological, and social aspects of human development;
2. Demonstrate critical thinking ability to identify similarities, differences, and connections among human development perspectives;
3. Thoughtfully reflect on the application of human development knowledge and skills to settings outside the university. Students should additionally be able to apply their knowledge and skills to new and diverse situations outside the university;
4. Access information, design and carry out individual and group research projects, and present them clearly, logically and persuasively;
5. Show ability to understand themselves reflectively and others empathetically and apply these skills to both academic and nonacademic contexts.

Career Opportunities

The interdisciplinary approach of the Human Development Program provides students with excellent preparation for graduate study in a wide range of disciplines, including anthropology, education, social work, sociology, medicine, public administration, law, criminal justice, psychology, and counseling. It also prepares students to work with people of all age groups from diverse racial, cultural, ethnic, socioeconomic, religious backgrounds, and sexual orientations. Students majoring in Human Development find a variety of career options in areas such as education, social work, health care, counseling, law and law enforcement, and human resource and organizational work in community or corporate settings.

Features

Human Development faculty members come from a wide range of academic disciplines, including anthropology, biology, human development, linguistics, neuropsychology, psychology, and sociology.

Students select one of five Options: Early Childhood Development, Childhood Development, Adolescent Development, Adult Development and Gerontology, or Women's Development.

Minors in Human Development and Women's Studies (please see Women's Studies Minor) are also offered.

Students have the opportunity to pursue internships that integrate academic learning and field experience, and promote the development of professional activities. Internships are graded Credit/No Credit only and may be repeated for credit.

As part of its commitment to educational access, the Program incorporates a broad range of educational formats, including online classes, hybrid classes that combine an online component with face-to-face interaction, and face-to-face lecture/discussion and seminar classes.

The major is offered at both the Hayward and Concord campuses.

The program also offers its major through P.A.C.E. (Program for Accelerated College Education). Please contact the P.A.C.E. office for further information.

Online Degree Programs

The On-line Human Development Degree Program for entering third year students is identical to the existing Human Development Program, with the exception that the degree is attained entirely on-line. Students participating in the On-line Degree Program may choose from three options: Early Childhood Development, Adult Development and Gerontology, and Women's Development.

The Online major consists of 80 units; the B.A. degree requires a total of 180 units, which includes 12 lower-division units from among three different categories.

II. Upper Division (68 units)

A. Junior Foundation Online Courses (24 units)

(Prerequisite: Upper Division Standing)

- HDEV 3101 - Lifespan Physical and Cognitive Development *Units: 4*
- HDEV 3102 - Lifespan Social and Emotional Development *Units: 4*
- HDEV 3103 - Social and Cultural Dynamics of Human Development *Units: 4*
- HDEV 3201 - Theories of Human Development *Units: 4*
- HDEV 3202 - Research Methods in Human Development *Units: 4*
- HDEV 3203 - Applying Theory and Methods of Human Development *Units: 4*

B. Lifespan Survey Online Courses (16 units)

(Prerequisite: Upper Division Standing)

- HDEV 3301 - Child Development *Units: 4*
- HDEV 3302 - Foundational Aspects of Adolescent Development *Units: 4*
- HDEV 3303 - Adult Development and Aging *Units: 4*

- HDEV 3304 - Girls and Women Across the Lifespan *Units: 4*

C. Senior Option Courses (20 units)

(Prerequisite: Upper Division Standing)

Choose ONE of the following two online Options:

D. Senior Capstone Courses (8 units)

(Prerequisite: Completion of all HDEV Junior Foundation Courses, plus 16 additional upper division HDEV units.)

(Students must enroll in two consecutive quarters for these two courses.)

- HDEV 4811 - Senior Research Seminar in Human Development I *Units: 4*
- HDEV 4812 - Senior Research Seminar in Human Development II *Units: 4*

Women's Development Online Option (20 units)

The Online Women's Development Option consists of 20 units of required and elective courses that focus on women's biological, psychological, and social development

Required courses (8 units)

- WOST 4130 - Women in Midlife Transition *Units: 4*
- WOST 4160 - Women and Aging *Units: 4*

Elective Courses (12 units)

Select 4 units from the following:

- HDEV 4310 - Human Development in the Changing Workplace *Units: 4*
- HDEV 4430 - Intimate Relationships Throughout the Lifespan *Units: 4*
- HDEV 4440 - Lesbian and Gay Lifespan Development *Units: 4*

Select 8 units from the following:

- ES 3030 - Immigrant and Refugee Women *Units: 4*
or
- WOST 3030 - Immigrant and Refugee Women *Units: 4*
- WOST 3050 - Feminist Theory *Units: 4*
- WOST 3400 - Women and Careers *Units: 4*
- WOST 3420 - Minority Women in America *Units: 4*
or
- ES 3420 - Minority Women in America *Units: 4*
- WOST 3520 - Mothers, Daughters, and Sons *Units: 4*
- WOST 3530 - Women and Their Bodies *Units: 4*
- WOST 3545 - Women's Health and Health Care *Units: 4*
- WOST 3550 - Women, Work, and Family Life *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Human Development, Women's Development Option, B.A.

Program Description

Human Development is an interdisciplinary program that integrates theory and methodology from disciplines such as anthropology, biology, linguistics, psychology, and sociology. The program explores the processes and mechanisms underlying developmental change and stability across the lifespan and the socio-cultural and historical contexts in which development takes place.

The Program's curriculum aims to develop in students a basic understanding of major research findings and core concepts in human development, the ability to analyze and evaluate theoretical and practical issues in the field, and the skills to apply learning to diverse communities outside the University. The Program strives to create an optimal learning community that values and fosters collaborative learning and dialogue between and among students and faculty from diverse backgrounds.

Student Learning Outcomes

Students graduating with a B.A. in Human Development from will be able to:

1. Demonstrate core knowledge in biological, psychological, and social aspects of human development;
2. Demonstrate critical thinking ability to identify similarities, differences, and connections among human development perspectives;
3. Thoughtfully reflect on the application of human development knowledge and skills to settings outside the university. Students should additionally be able to apply their knowledge and skills to new and diverse situations outside the university;
4. Access information, design and carry out individual and group research projects, and present them clearly, logically and persuasively;
5. Show ability to understand themselves reflectively and others empathetically and apply these skills to both academic and nonacademic contexts.

Career Opportunities

The interdisciplinary approach of the Human Development Program provides students with excellent preparation for graduate study in a wide range of disciplines, including anthropology, education, social work, sociology, medicine, public administration, law, criminal justice, psychology, and counseling. It also prepares students to work with people of all age groups from diverse racial, cultural, ethnic, socioeconomic, religious backgrounds, and sexual orientations. Students majoring in Human Development find a variety of career options in areas such as education, social work, health care, counseling, law and law enforcement, and human resource and organizational work in community or corporate settings.

Features

Human Development faculty members come from a wide range of academic disciplines, including anthropology, biology, human development, linguistics, neuropsychology, psychology, and sociology.

Students select one of five Options: Early Childhood Development, Childhood Development, Adolescent Development, Adult Development and Gerontology, or Women's Development.

Minors in Human Development and Women's Studies (please see Women's Studies Minor) are also offered.

Students have the opportunity to pursue internships that integrate academic learning and field experience, and promote the development of professional activities. Internships are graded Credit/No Credit only and may be repeated for credit.

As part of its commitment to educational access, the Program incorporates a broad range of educational formats, including online classes, hybrid classes that combine an online component with face-to-face interaction, and face-to-face lecture/discussion and seminar classes.

The major is offered at both the Hayward and Concord campuses.

The program also offers its major through P.A.C.E. (Program for Accelerated College Education). Please contact the P.A.C.E. office for further information.

Major Requirements (B.A.)

The major consists of 80 units; the B.A. degree in Human Development requires a total of 180 units.

I. Lower Division (12 units)

Select three 4-unit courses from the following categories, with no more than one course from each category.

- A. Anthropology (cultural or social)
- B. Psychology
- C. Sociology
- D. Human biology or physical anthropology
- E. Human or child development
- F. Ethnic or area studies
- G. Additional categories (e.g., statistics, gerontology, developmental disabilities) may be approved by the department

II. Upper Division (68 units)

A. Junior Foundation Courses (24 units)

(Prerequisite: Upper Division Standing)

- HDEV 3101 - Lifespan Physical and Cognitive Development *Units: 4*
- HDEV 3102 - Lifespan Social and Emotional Development *Units: 4*
- HDEV 3103 - Social and Cultural Dynamics of Human Development *Units: 4*
- HDEV 3201 - Theories of Human Development *Units: 4*
- HDEV 3202 - Research Methods in Human Development *Units: 4*
- HDEV 3203 - Applying Theory and Methods of Human Development *Units: 4*

B. Lifespan Survey Courses (16 units)

(Prerequisite: Upper Division Standing)

- HDEV 3301 - Child Development *Units: 4*
- HDEV 3302 - Foundational Aspects of Adolescent Development *Units: 4*
- HDEV 3303 - Adult Development and Aging *Units: 4*
- HDEV 3304 - Girls and Women Across the Lifespan *Units: 4*

C. Senior Option Courses (20 units)

(Prerequisite: Upper Division Standing)

Choose one of the following five Options:

D. Senior Capstone Courses (8 units)

(Prerequisite: Completion of all HDEV Junior Foundation Courses, plus 16 additional upper division HDEV units.)
(Students must enroll in two consecutive quarters for these two courses.)

- HDEV 4811 - Senior Research Seminar in Human Development I *Units: 4*
- HDEV 4812 - Senior Research Seminar in Human Development II *Units: 4*

Women's Development Option (20 units)

The Women's Development Option consists of 20 units of required and elective courses that focus on women's biological, psychological, and social development.

Required Courses (8 units)

- WOST 4130 - Women in Midlife Transition *Units: 4*
- WOST 4160 - Women and Aging *Units: 4*

Elective Courses (12 units)

Select 4 units from the following:

- HDEV 4310 - Human Development in the Changing Workplace *Units: 4*
- HDEV 4430 - Intimate Relationships Throughout the Lifespan *Units: 4*
- HDEV 4440 - Lesbian and Gay Lifespan Development *Units: 4*
- HDEV 4450 - Human Development and Conflict in Contemporary Society *Units: 4*

Select 8 units from the following:

- ES 3030 - Immigrant and Refugee Women *Units: 4*
or
- WOST 3030 - Immigrant and Refugee Women *Units: 4*

- WOST 3050 - Feminist Theory *Units: 4*
- WOST 3400 - Women and Careers *Units: 4*

- WOST 3420 - Minority Women in America *Units: 4*
or
- ES 3420 - Minority Women in America *Units: 4*

- WOST 3520 - Mothers, Daughters, and Sons *Units: 4*
- WOST 3530 - Women and Their Bodies *Units: 4*
- WOST 3545 - Women's Health and Health Care *Units: 4*
- WOST 3550 - Women, Work, and Family Life *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Industrial Engineering, B.S.

The major consists of 143 units. The B.S. Degree requires 187 units.

I. Lower Division (65 units)

- CHEM 1101 - General Chemistry *Units: 5*
- CS 1160 - Introduction to Computer Science I *Units: 4*
- ECON 2301 - Principles of Microeconomics *Units: 4*
- ENGR 1011 - Engineering: An Introduction *Units: 3*
- ENGR 1420 - Engineering Graphics *Units: 2*
- ENGR 2010 - Electric Circuit Theory I *Units: 3*
- ENGR 2060 - Materials Science *Units: 4*
- ENGR 2070 - Fundamentals of Manufacturing *Units: 4*
- MATH 1304 - Calculus I *Units: 4*
- MATH 1305 - Calculus II *Units: 4*
- MATH 2101 - Elements of Linear Algebra *Units: 4*
- MATH 2304 - Calculus III *Units: 4*
- PHYS 1001 - General Physics: Newtonian Mechanics and Oscillations *Units: 5*
- PHYS 1002 - General Physics: Thermodynamics and Optics *Units: 5*
- PHYS 1003 - General Physics: Electromagnetism *Units: 5*
- PSYC 1005 - General Psychology for Healthier Living *Units: 5* (or one of 1000 or 1001)

Note:

Most of the lower division ENGR courses are available at local community colleges. Community college students should take them prior to transferring to Cal State East Bay.

II. Upper Division Core Requirements (66 units)

- INDE 3020 - Work Design and Measurement *Units: 4*
- INDE 3101 - Statics and Dynamics *Units: 4*
- INDE 3140 - Engineering Economy *Units: 4*
- INDE 3190 - Human Factors Engineering *Units: 4*
or cross-listed: PSYC 3190
- INDE 3841 - Operations Research *Units: 4*
- INDE 4100 - Production Planning and Control *Units: 4*
- INDE 4200 - Systems Simulation *Units: 4*
- INDE 4280 - Design and Management of Human Work Systems *Units: 4*
- INDE 4300 - Quality Engineering *Units: 4*
- INDE 4350 - Reliability Engineering *Units: 4*
- INDE 4400 - Systems Modeling *Units: 4*
- INDE 4430 - Facilities Planning and Design *Units: 4*
- INDE 4440 - Computer Integrated Manufacturing Systems *Units: 4*
- INDE 4610 - Senior Design I *Units: 3*
- INDE 4620 - Senior Design II *Units: 3*
- INDE 3601 - Statistics and Probability for Science and Engineering I *Units: 4*
or cross-listed: STAT 3601
- INDE 3602 - Statistics and Probability for Science and Engineering II *Units: 4*
or cross-listed: STAT 3602

III. Electives (12 units)

Select one course (8 units) from the following (or other 3000 or above Math or Basic Science courses with Departmental approval):

- BIOL 3020 - Genetics, Evolution, and Humanity *Units: 4*
- MATH 3331 - Differential Equations *Units: 4*

- MATH 3750 - Numerical Analysis I *Units: 4*
or cross-listed CS 3750

Select two courses (4 units) units from the following (or other 3000 or 4000 level courses with Department approval):

- INDE 3898 - Cooperative Education *Units: 1-4*
- INDE 4180 - Product-Process Design *Units: 4*
- INDE 4900 - Independent Study *Units: 1-4*
- MATH 4841 - Topics in Optimization *Units: 4*
- MGMT 3600 - Theories of Management *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Interdisciplinary Studies, B.A.

Major Requirements (B.A./B.S.)

Note: The programs are currently undergoing review. Students interested in pursuing the Interdisciplinary Studies B.A. or B.S. or a Special Certificate should contact Linda Beebe in the General Education Office, SA 1500 for forms and information.

The university offers both the B.A. and B.S. degrees with an Interdisciplinary Studies Major. There are no clearly defined differences between the two degrees, although B.S. degrees tend to be applied programs, while the B.A. is usually considered a liberal arts and social sciences degree. Normally, the type of degree awarded for an Interdisciplinary Studies Major reflects the degrees offered by the involved departments. To be eligible for an Interdisciplinary Studies Major, a student must have a cumulative GPA of at least 2.50. An Interdisciplinary Studies Major must be a coherent program organized around a sound academic theme. The title of an Interdisciplinary Studies Major should be short (three to five words) and should describe the central academic theme of the program, not the student's career objectives unless the two coincide.

An Interdisciplinary Studies Major must be fully approved before the student has fewer than 40 quarter units to complete the major and 60 for the degree. An Interdisciplinary Studies Major must contain at least 52 quarter units for the B.A. or 54 quarter units for the B.S. degree. The maximum number of quarter units for the Interdisciplinary Studies Major is 93 units for either the B.A. or the B.S., of which at least 36 are upper division (junior/senior level). Coursework in at least two different disciplines is required. The B.A. and B.S. degrees with an Interdisciplinary Studies Major require a total of at least 180 units.

Courses in the Interdisciplinary Studies Major are not applicable to the General Education-Breadth Requirements. (However, previously completed transfer evaluations will not be reevaluated). A student can take courses for G.E. purposes in departments involved in the major. However, any individual course used for G.E. cannot also be used in the major, except for courses which are exempt under the G.E. policy. (See the B.A./ B.S. Degree Requirements chapter.). Only one course from a department involved in the major can be applied to G.E.

Procedure

A student who contemplates developing an Interdisciplinary Studies Major must have an overall and CSUEB grade point average of at least 2.50. Forethought and planning will need to precede any formal action. You may make an appointment to discuss all the necessary steps for getting your Interdisciplinary Studies major approved by emailing the Office of General Education at vicki.cosgrove@csueastbay.edu or call (510) 885-2941.

The prospective Interdisciplinary Studies Major student must prepare a one page prospectus of at least 200 words describing the theme or central academic focus of the proposed program (including the departments to be involved), the reasons why the objective cannot be fulfilled through a regular major, the academic and experiential background the student will bring to the program, the occupational goals of the student in relation to the proposal, the approximate time frame for completion of the major and the degree, and other pertinent information. A sample prospectus for a hypothetical Interdisciplinary Studies Major will be given to the student by the Interdisciplinary Studies Coordinator when they meet at the

information appointment, which starts the process towards an approved Interdisciplinary Studies major. The student must also contact three faculty advisors in the involved departments, secure their support, and nominate them as his/her Interdisciplinary Studies Major committee. (One of these faculty advisors should be designated as chair of the committee.)

The prospectus, including the names of the three faculty advisors (and their departments), must be submitted to the Interdisciplinary Studies Major Coordinator in the Office of General Education before the student has fewer than 40 units left to complete in the proposed major and 60 units in the degree.

If the proposal is found academically sound and logistically feasible by the Interdisciplinary Studies Major Coordinator will forward copies of it to the proposed faculty committee members along with an explanation of the Interdisciplinary Studies Major policies and procedures, copies of the student's transcripts, and a form for development and approval of the specific program of courses.

The three-person committee and the student must meet at a mutually acceptable time to design the program (i.e. to prepare the list of required and elective courses). When this is done, the form is completed, signatures of approval are affixed, and it is returned to the Interdisciplinary Studies Major Coordinator by the chair of the student's faculty committee. The Interdisciplinary Studies Major Coordinator circulates the proposal to the deans of the involved colleges for commentary. After reviewing any comments, the Senior Director of Undergraduate Studies and General Education will act on the proposal. If it is approved, a final copy is prepared and the coordinator and the student sign it. When the student comes in to sign and receive a copy, a "Change of Major/Minor/Option" form must also be signed. The student will also be informed of the college from which he/she will graduate.

General Education

All students must also complete the general education-breadth and other graduation requirements for the baccalaureate degree. Normally, courses used for the Interdisciplinary Studies Major cannot be used for G.E., but transfer G.E. evaluations will not be redone. Check your catalog or see an advisor at the University Advisement Center for more information.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Interdisciplinary Studies, B.S.

Major Requirements (B.A./B.S.)

Note: The programs are currently undergoing review. Students interested in pursuing the Interdisciplinary Studies B.A. or B.S. or a Special Certificate should contact Linda Beebe in the General Education Office, SA 1500 for forms and information.

The university offers both the B.A. and B.S. degrees with an Interdisciplinary Studies Major. There are no clearly defined differences between the two degrees, although B.S. degrees tend to be applied programs, while the B.A. is usually considered a liberal arts and social sciences degree. Normally, the type of degree awarded for an Interdisciplinary Studies Major reflects the degrees offered by the involved departments. To be eligible for an Interdisciplinary Studies Major, a student must have a cumulative GPA of at least 2.50. An Interdisciplinary Studies Major must be a coherent program organized around a sound academic theme. The title of an Interdisciplinary Studies Major should be short (three to five words) and should describe the central academic theme of the program, not the student's career objectives unless the two coincide.

An Interdisciplinary Studies Major must be fully approved before the student has fewer than 40 quarter units to complete the major and 60 for the degree. An Interdisciplinary Studies Major must contain at least 52 quarter units for the B.A. or 54 quarter units for the B.S. degree. The maximum number of quarter units for the Interdisciplinary Studies Major is 93 units for either the B.A. or the B.S., of which at least 36 are upper division (junior/senior level). Coursework in at least two different disciplines is required. The B.A. and B.S. degrees with an Interdisciplinary Studies Major require a total of at least 180 units.

Courses in the Interdisciplinary Studies Major are not applicable to the General Education-Breadth Requirements. (However, previously completed transfer evaluations will not be reevaluated). A student can take courses for G.E. purposes in departments involved in the major. However, any individual course used for G.E. cannot also be used in the major, except for courses which are exempt under the G.E. policy. (See the B.A./ B.S. Degree Requirements chapter.). Only one course from a department involved in the major can be applied to G.E.

Procedure

A student who contemplates developing an Interdisciplinary Studies Major must have an overall and CSUEB grade point average of at least 2.50. Forethought and planning will need to precede any formal action. You may make an appointment to discuss all the necessary steps for getting your Interdisciplinary Studies major approved by emailing the Office of General Education at vicki.cosgrove@csueastbay.edu or call (510) 885-2941.

The prospective Interdisciplinary Studies Major student must prepare a one page prospectus of at least 200 words describing the theme or central academic focus of the proposed program (including the departments to be involved), the reasons why the objective cannot be fulfilled through a regular major, the academic and experiential background the student will bring to the program, the occupational goals of the student in relation to the proposal, the approximate time frame for completion of the major and the degree, and other pertinent information. A sample prospectus for a hypothetical Interdisciplinary Studies Major will be given to the student by the Interdisciplinary Studies Coordinator when they meet at the information appointment, which starts the process towards an approved Interdisciplinary Studies major. The student must also contact three faculty advisors in the involved departments, secure their support, and nominate them as his/her Interdisciplinary Studies Major committee. (One of these faculty advisors should be designated as chair of the committee.)

The prospectus, including the names of the three faculty advisors (and their departments), must be submitted to the Interdisciplinary Studies Major Coordinator in the Office of General Education before the student has fewer than 40 units left to complete in the proposed major and 60 units in the degree.

If the proposal is found academically sound and logistically feasible by the Interdisciplinary Studies Major Coordinator will forward copies of it to the proposed faculty committee members along with an explanation of the Interdisciplinary Studies Major policies and procedures, copies of the student's transcripts, and a form for development and approval of the specific program of courses.

The three-person committee and the student must meet at a mutually acceptable time to design the program (i.e. to prepare the list of required and elective courses). When this is done, the form is completed, signatures of approval are affixed, and it is returned to the Interdisciplinary Studies Major Coordinator by the chair of the student's faculty committee. The Interdisciplinary Studies Major Coordinator circulates the proposal to the deans of the involved colleges for commentary. After reviewing any comments, the Senior Director of Undergraduate Studies and General Education will act on the proposal. If it is approved, a final copy is prepared and the coordinator and the student sign it. When the student comes in to sign and receive a copy, a "Change of Major/Minor/Option" form must also be signed. The student will also be informed of the college from which he/she will graduate.

General Education

All students must also complete the general education-breadth and other graduation requirements for the baccalaureate degree. Normally, courses used for the Interdisciplinary Studies Major cannot be used for G.E., but transfer G.E. evaluations will not be redone. Check your catalog or see an advisor at the University Advisement Center for more information.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

International Studies, B.A.

Major Requirements (B.A.)

Because requirements are subject to change, consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 58-85 units; the B.A. degree requires a total of 180 units.

I. Lower Division (12-36 units)

A. Select one from the following:

- ANTH 1300 - Introduction to Cultural Anthropology *Units: 4*
- GEOG 2300 - Cultural Geography *Units: 4*

B. Select one of the following:

- ECON 1000 - Economics of Public Issues *Units: 4*
- ECON 2301 - Principles of Microeconomics *Units: 4*
- ECON 2302 - Principles of Macroeconomics *Units: 4*

C. Economic Geography

- GEOG 2310 - Economic and Resource Geography *Units: 4*

D. Modern Language Requirement (0-24 units)

Oral and written proficiency in a modern foreign language equivalent to two full years of university-level studies. The requirement can be fulfilled by the recent completion of the third quarter of intermediate language at Cal State East Bay or by an examination offered by the Department of Modern Languages and Literatures measuring oral and written proficiency at that level.

II. Upper Division Core (14-16 units)

A. Twelve units of the following courses

- INTS 3100 - Global Systems *Units: 4*
- INTS 4500 - Senior Seminar *Units: 4*
- HIST 3017 - The Twentieth Century *Units: 4*

B. International Field Experience (minimum 2 units) through one of the following:

- INTS 4100 - International Field Work *Units: 2-4*
(or an approved course of study in a foreign country)

Note:

In order to fulfill this requirement, any experiential activity or course of study must be pre-approved by an International Studies advisor.

III. Methods Course (4-5 units)

One methods course selected from the following list:

- ANTH 4310 - Field Course in Ethnography *Units: 5*
- COMM 3200 - Introduction to Research Methods in Communication *Units: 4*
- ECON 4400 - Introduction to Econometrics *Units: 4*
- HIST 3010 - Historical Writing *Units: 4*
- MGMT 3100 - Decision Science *Units: 4*
- PHIL 3321 - Philosophy of the Human Sciences *Units: 4*
- POSC 3300 - Voting and Public Opinion *Units: 4*
- PSYC 2020 - Methods of Investigation in Psychology *Units: 4*
- SOC 3000 - Introduction to Sociological Research *Units: 4*
- SOC 4111 - Methods of Sociological Research I *Units: 4*
- STAT 3010 - Statistical Methods in the Social Sciences *Units: 4*
- STAT 4610 - Introduction to Nonparametric Statistical Methods *Units: 4*

IV. Area of Emphasis (16 units)

Emphasis courses: 4 courses (16 units) to be chosen with the approval of an advisor in either

1. a discipline area (example: Anthropology, Economics, History);
2. a regional area (example: Asia, Europe, Latin America, Middle East); or
3. a topic area (example: international business, international organizations and law, arms control, economic development, environmental issues, cross-cultural studies, migration). All courses selected should be internationally relevant.

V. Upper Division Electives (12 units)

Select from the following with no more than 2 courses in any one discipline

- ANTH 3000 - Anthropology in the Modern World *Units: 4*
(or any upper division anthropology course with primarily international content)
- COMM 4110 - International Communication *Units: 4*
- COMM 4830 - Intercultural Communication *Units: 4*
- ECON: Any upper division International Economics course
- FIN 4375 - International Business Finance *Units: 4*
- MLL: Any upper division modern language course not primarily devoted to literature
- GEOG/ENVT: Any geography or environmental studies course with primarily international content
- HIST: Any upper division modern history course with primarily international content
- INTS: Any upper division international studies course
- MGMT 4670 - Multinational Business *Units: 4*
- MKTG 4470 - International Marketing *Units: 4*
- POSC: Any upper division political science course devoted to comparative government or international relations
- SOC 3431 - Seminar in World Development *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Kinesiology, Exercise, Nutrition, and Wellness Option, B.S.

Program Description

Kinesiology is the disciplinary study of humans as they participate in physical activity. Professional applications offered by the department include Physical Activity Studies; Exercise, Nutrition, and Wellness; Therapeutic Studies; Social Justice; and Physical Education Teaching.

The purposes of the Department of Kinesiology are (1) to provide an opportunity for students to study the discipline of Kinesiology; and (2) to provide opportunities for learning and participation in a wide variety of motor activities. Such study includes an investigation into the nature of physical activity, how it is assessed, what its effects are upon the rest of human bodily systems, and how motor performance is learned. It also involves an investigation of the historical, cultural, philosophical, psychological, and social factors which result from and influence play, games, sports, and physical activity.

The department's program also offers courses appropriate to the general education curriculum of the university in the humanities, social sciences, sciences, and life-long learning. It provides the necessary foundation for students who wish to continue their own personal lifelong activities.

Student Learning Outcomes

Students graduating with a B.S. in Kinesiology from Cal State East Bay will be able to:

1. demonstrate the ability to synthesize and apply perspectives from the humanities, and the social-, behavioral-, and life-sciences (crossdisciplinary knowledge);
2. use disciplinary knowledge to design and implement innovative professional application (problem solving);
3. characterize thought processes by the exploration of discipline-relevant issues, ideas, artifacts, and events before accepting or formulating a perspective (critical thinking);
4. use contextually-grounded and compelling content to articulate physical activity issues in both oral and written form (communication skills), and
5. demonstrate professional dispositions - such as integrity, personal and cultural sensitivity, and collaboration - as well as commitment to social justice for physical activity participants when leading others in a kinesiology-relevant domain.

Career Opportunities

- Activities Director
- Allied Health Fields (Physical Therapy, Occupational Therapy, Chiropractic)
- Coach
- Community College Teacher
- Community Fitness Agency Director
- Exercise/Nutrition Counselor
- Physical Education Teacher
- University Instructor
- Wellness Specialist

Features

Many of the facilities are open to the campus community when not being used for classes. These may include swimming pools, tennis courts, handball courts, fitness center, the gymnasium, and outdoor fields.

Students enrolled in the intercollegiate athletic programs have the opportunity to engage in numerous field trips throughout California and, in some cases, in neighboring states. The intercollegiate athletic program includes: basketball, cross country, golf, soccer, and track for men and women; baseball for men; and softball, swimming, volleyball, and water polo for women.

There is one scholarship housed within the Department of Kinesiology. Recipients of the Joe Morgan Scholarship, named for the Hall of Fame baseball player who is a Cal State East Bay graduate, are identified each Winter with the award(s) applying to the subsequent year. The amount of the Joe Morgan award varies and multiple awards may be given.

Major Requirements (B.S.)

Consult your advisor for clarification and interpretation of major requirements. The major consists of 93-111 units; the B.S. degree requires a total of 180 units.

I. Lower Division Core (9 units)

Lower division requirements vary depending on the option, but the following two courses are required for every option:

- BIOL 2010 - Human Physiology and Anatomy I *Units: 5*
or BIOL 2011 (5)
- KIN 1610 - Introduction to Kinesiology *Units: 4*

II. Upper Division Core (45 units)

- KIN 3300 - Critical Inquiry in Kinesiology *Units: 5*
- KIN 3305 - Structural Kinesiology *Units: 4*
- KIN 3310 - Biomechanics *Units: 5*

- KIN 3320 - Exercise Physiology *Units: 5*
- KIN 3330 - Motor Learning and Control *Units: 5*
- KIN 3340 - Motor Development *Units: 4*
- KIN 3350 - Sport and Exercise Psychology *Units: 5*
- KIN 3701 - History of Physical Activity *Units: 4*
- KIN 3740 - Philosophical Foundations of Kinesiology *Units: 4*
- KIN 3750 - Sport in Contemporary Society *Units: 4*

III. Performance Requirements (6 units)

One beginning level course must be repeated at the intermediate level. Satisfactory completion in each of five categories; swimming, combatives, teams sports, individual or dual sports, and fitness activities.

IV. Option Requirements

(In addition to the lower and upper division Core requirements listed above, students must complete one of the following options.)

Note:

Students intending to pursue graduate studies in athletic training it is suggested to take KIN 4600 Athletic Training Practicum.

Students intending to pursue entry into a graduate Entry Level Athletic Education Training Program are strongly encouraged to examine prerequisites for the desired program.

Students intending to pursue a career in coaching are recommended to take:

- KIN 2600 Prevention and Care of Athletic Injuries;
- KIN 3600 Evaluation and Care of Athletic Injuries;
- KIN 3601 Athletic Training: Modalities and Rehabilitation; *and*
- KIN 4600 Athletic Training Practicum.

See the Single Subject Matter Preparation in Physical Education in the Programs of Study chapter.

Exercise, Nutrition, and Wellness Option (42 units)

The Exercise Nutrition and Wellness option explores the relationship between nutrition and exercise. Both metabolic and behavioral implications are investigated. The major with this option totals 102 units.

1. Lower Division (18 units)

- BIOL 2020 - Human Physiology and Anatomy II *Units: 5*
- CHEM 1100 - Introduction to College Chemistry *Units: 5* or equivalent
- KIN 1625 - Nutrition and Performance *Units: 4*
- KIN 2600 - Prevention and Care of Athletic Injuries *Units: 4*

2. Upper Division (24 units)

- KIN 4005 - Exercise Nutrition and Metabolism *Units: 4*
- KIN 4010 - Contemporary Perspectives in Exercise Nutrition *Units: 4*
- KIN 4031 - Professional Field Experience II *Units: 1-4*
- KIN 4330 - Clinical Exercise Physiology *Units: 4*
- KIN 4610 - Exercise Prescription *Units: 4*

- KIN 4615 - Exercise and Stress *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Kinesiology, Physical Activity Studies Option, B.S.

Program Description

Kinesiology is the disciplinary study of humans as they participate in physical activity. Professional applications offered by the department include Physical Activity Studies; Exercise, Nutrition, and Wellness; Therapeutic Studies; Social Justice; and Physical Education Teaching.

The purposes of the Department of Kinesiology are (1) to provide an opportunity for students to study the discipline of Kinesiology; and (2) to provide opportunities for learning and participation in a wide variety of motor activities. Such study includes an investigation into the nature of physical activity, how it is assessed, what its effects are upon the rest of human bodily systems, and how motor performance is learned. It also involves an investigation of the historical, cultural, philosophical, psychological, and social factors which result from and influence play, games, sports, and physical activity.

The department's program also offers courses appropriate to the general education curriculum of the university in the humanities, social sciences, sciences, and life-long learning. It provides the necessary foundation for students who wish to continue their own personal lifelong activities.

Student Learning Outcomes

Students graduating with a B.S. in Kinesiology from Cal State East Bay will be able to:

1. demonstrate the ability to synthesize and apply perspectives from the humanities, and the social-, behavioral-, and life-sciences (crossdisciplinary knowledge);
2. use disciplinary knowledge to design and implement innovative professional application (problem solving);
3. characterize thought processes by the exploration of discipline-relevant issues, ideas, artifacts, and events before accepting or formulating a perspective (critical thinking);
4. use contextually-grounded and compelling content to articulate physical activity issues in both oral and written form (communication skills), and
5. demonstrate professional dispositions - such as integrity, personal and cultural sensitivity, and collaboration - as well as commitment to social justice for physical activity participants when leading others in a kinesiology-relevant domain.

Career Opportunities

- Activities Director
- Allied Health Fields (Physical Therapy, Occupational Therapy, Chiropractic)
- Coach
- Community College Teacher
- Community Fitness Agency Director
- Exercise/Nutrition Counselor
- Physical Education Teacher
- University Instructor
- Wellness Specialist

Features

Many of the facilities are open to the campus community when not being used for classes. These may include swimming pools, tennis courts, handball courts, fitness center, the gymnasium, and outdoor fields.

Students enrolled in the intercollegiate athletic programs have the opportunity to engage in numerous field trips throughout California and, in some cases, in neighboring states. The intercollegiate athletic program includes: basketball, cross country, golf, soccer, and track for men and women; baseball for men; and softball, swimming, volleyball, and water polo for women.

There is one scholarship housed within the Department of Kinesiology. Recipients of the Joe Morgan Scholarship, named for the Hall of Fame baseball player who is a Cal State East Bay graduate, are identified each Winter with the award(s) applying to the subsequent year. The amount of the Joe Morgan award varies and multiple awards may be given.

Major Requirements (B.S.)

Consult your advisor for clarification and interpretation of major requirements. The major consists of 93-111 units; the B.S. degree requires a total of 180 units.

I. Lower Division Core (9 units)

Lower division requirements vary depending on the option, but the following two courses are required for every option:

- BIOL 2010 - Human Physiology and Anatomy I *Units: 5*
or BIOL 2011 (5)
- KIN 1610 - Introduction to Kinesiology *Units: 4*

II. Upper Division Core (45 units)

- KIN 3300 - Critical Inquiry in Kinesiology *Units: 5*
- KIN 3305 - Structural Kinesiology *Units: 4*
- KIN 3310 - Biomechanics *Units: 5*
- KIN 3320 - Exercise Physiology *Units: 5*
- KIN 3330 - Motor Learning and Control *Units: 5*
- KIN 3340 - Motor Development *Units: 4*
- KIN 3350 - Sport and Exercise Psychology *Units: 5*
- KIN 3701 - History of Physical Activity *Units: 4*
- KIN 3740 - Philosophical Foundations of Kinesiology *Units: 4*
- KIN 3750 - Sport in Contemporary Society *Units: 4*

III. Performance Requirements (6 units)

One beginning level course must be repeated at the intermediate level. Satisfactory completion in each of five categories; swimming, combatives, teams sports, individual or dual sports, and fitness activities.

IV. Option Requirements

(In addition to the lower and upper division Core requirements listed above, students must complete one of the following options.)

Note:

Students intending to pursue graduate studies in athletic training it is suggested to take KIN 4600 Athletic Training Practicum.

Students intending to pursue entry into a graduate Entry Level Athletic Education Training Program are strongly encouraged to examine prerequisites for the desired program.

Students intending to pursue a career in coaching are recommended to take:

- KIN 2600 Prevention and Care of Athletic Injuries;
- KIN 3600 Evaluation and Care of Athletic Injuries;
- KIN 3601 Athletic Training: Modalities and Rehabilitation; *and*
- KIN 4600 Athletic Training Practicum.

See the **Single Subject Matter Preparation in Physical Education in the Programs of Study** chapter.

Physical Activity Studies Option (44 units)

Kinesiology is a multidisciplinary field that explores human movement from the perspectives of the humanities and social, behavioral, and life sciences. This option would allow students to take additional classes in Kinesiology from across the spectrum of the discipline.

Forty four (44) units from the following list of courses are required;

no more than 8 units can come from Recreation (REC). The major with this option totals 104 units.

- KIN 3200 - Sport in Film: Cultural Perspectives *Units: 4*
- KIN 3205 - Mental Skills for Performance *Units: 4*
- KIN 3210 - Science of Expertise *Units: 4*
- KIN 3600 - Evaluation and Care of Athletic Injuries *Units: 5*
- KIN 3601 - Athletic Training: Modalities and Rehabilitation *Units: 4*
- KIN 3735 - Sport, Racism, and Ethnicity *Units: 4*
- KIN 4008 - Adapted Physical Activity *Units: 4*
- KIN 4010 - Contemporary Perspectives in Exercise Nutrition *Units: 4*
- KIN 4090 - Computer Application in Kinesiology *Units: 4*
- KIN 4330 - Clinical Exercise Physiology *Units: 4*
- KIN 4610 - Exercise Prescription *Units: 4*
- KIN 4615 - Exercise and Stress *Units: 4*
- REC 3000 - Philosophy of Leisure *Units: 4*
- REC 3200 - Wellness Through Leisure *Units: 4*
- REC 3202 - Women and Leisure *Units: 4*
- REC 3300 - Leadership in Hospitality, Recreation and Tourism *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Kinesiology, Physical Education Teaching Option, B.S.

Program Description

Kinesiology is the disciplinary study of humans as they participate in physical activity. Professional applications offered by the department include Physical Activity Studies; Exercise, Nutrition, and Wellness; Therapeutic Studies; Social Justice; and Physical Education Teaching.

The purposes of the Department of Kinesiology are (1) to provide an opportunity for students to study the discipline of Kinesiology; and (2) to provide opportunities for learning and participation in a wide variety of motor activities. Such study includes an investigation into the nature of physical activity, how it is assessed, what its effects are upon the rest of human bodily systems, and how motor performance is learned. It also

involves an investigation of the historical, cultural, philosophical, psychological, and social factors which result from and influence play, games, sports, and physical activity.

The department's program also offers courses appropriate to the general education curriculum of the university in the humanities, social sciences, sciences, and life-long learning. It provides the necessary foundation for students who wish to continue their own personal lifelong activities.

Student Learning Outcomes

Students graduating with a B.S. in Kinesiology from Cal State East Bay will be able to:

1. demonstrate the ability to synthesize and apply perspectives from the humanities, and the social-, behavioral-, and life-sciences (crossdisciplinary knowledge);
2. use disciplinary knowledge to design and implement innovative professional application (problem solving);
3. characterize thought processes by the exploration of discipline-relevant issues, ideas, artifacts, and events before accepting or formulating a perspective (critical thinking);
4. use contextually-grounded and compelling content to articulate physical activity issues in both oral and written form (communication skills), and
5. demonstrate professional dispositions - such as integrity, personal and cultural sensitivity, and collaboration - as well as commitment to social justice for physical activity participants when leading others in a kinesiology-relevant domain.

Career Opportunities

- Activities Director
- Allied Health Fields (Physical Therapy, Occupational Therapy, Chiropractic)
- Coach
- Community College Teacher
- Community Fitness Agency Director
- Exercise/Nutrition Counselor
- Physical Education Teacher
- University Instructor
- Wellness Specialist

Features

Many of the facilities are open to the campus community when not being used for classes. These may include swimming pools, tennis courts, handball courts, fitness center, the gymnasium, and outdoor fields.

Students enrolled in the intercollegiate athletic programs have the opportunity to engage in numerous field trips throughout California and, in some cases, in neighboring states. The intercollegiate athletic program includes: basketball, cross country, golf, soccer, and track for men and women; baseball for men; and softball, swimming, volleyball, and water polo for women.

There is one scholarship housed within the Department of Kinesiology. Recipients of the Joe Morgan Scholarship, named for the Hall of Fame baseball player who is a Cal State East Bay graduate, are identified each Winter with the award(s) applying to the subsequent year. The amount of the Joe Morgan award varies and multiple awards may be given.

Major Requirements (B.S.)

Consult your advisor for clarification and interpretation of major requirements. The major consists of 93-111 units; the B.S. degree requires a total of 180 units.

I. Lower Division Core (9 units)

Lower division requirements vary depending on the option, but the following two courses are required for every option:

- BIOL 2010 - Human Physiology and Anatomy I *Units: 5*
or *BIOL 2011 (5)*

- KIN 1610 - Introduction to Kinesiology *Units: 4*

II. Upper Division Core (45 units)

- KIN 3300 - Critical Inquiry in Kinesiology *Units: 5*
- KIN 3305 - Structural Kinesiology *Units: 4*
- KIN 3310 - Biomechanics *Units: 5*
- KIN 3320 - Exercise Physiology *Units: 5*
- KIN 3330 - Motor Learning and Control *Units: 5*
- KIN 3340 - Motor Development *Units: 4*
- KIN 3350 - Sport and Exercise Psychology *Units: 5*
- KIN 3701 - History of Physical Activity *Units: 4*
- KIN 3740 - Philosophical Foundations of Kinesiology *Units: 4*
- KIN 3750 - Sport in Contemporary Society *Units: 4*

III. Performance Requirements (6 units)

One beginning level course must be repeated at the intermediate level. Satisfactory completion in each of five categories; swimming, combatives, teams sports, individual or dual sports, and fitness activities.

IV. Option Requirements

(In addition to the lower and upper division Core requirements listed above, students must complete one of the following options.)

Note:

Students intending to pursue graduate studies in athletic training it is suggested to take KIN 4600 Athletic Training Practicum.

Students intending to pursue entry into a graduate Entry Level Athletic Education Training Program are strongly encouraged to examine prerequisites for the desired program.

Students intending to pursue a career in coaching are recommended to take:

- KIN 2600 Prevention and Care of Athletic Injuries;
- KIN 3600 Evaluation and Care of Athletic Injuries;
- KIN 3601 Athletic Training: Modalities and Rehabilitation; *and*
- KIN 4600 Athletic Training Practicum.

See the Single Subject Matter Preparation in Physical Education in the Programs of Study chapter.

Physical Education Teaching Option (38 units)

The Physical Education Teaching Option is designed to prepare students for teaching physical education in grades K-12 in public and private schools. The required courses in the B.S. Kinesiology, Physical Education Teaching Option, meet the Physical Education undergraduate Single Subject Matter Preparation requirements established by the California Commission on Teacher Credentialing (CCTC). To earn the Single Subject Teaching Credential in Physical Education, students must complete an additional year of study in the credential program offered in the Department of Teacher Education. The major with this option totals 98 units.

1. Lower Division (2 units)

- KIN 2650 - CPR and First Aid *Units: 2*

2. Upper Division (32 units)

Theory-Analysis-Practice Courses (16 units)

- DANC 3235 - Dance for Children *Units: 4*
- KIN 3072 - Individual and Dual Sports *Units: 3*
- KIN 3075 - Aquatics and Outdoor Education *Units: 3*
- KIN 3079 - Combatives and Fitness Activities *Units: 3*
- KIN 3080 - Team Sports and Field Sports *Units: 3*

Foundation Course (4 units)

- KIN 4008 - Adapted Physical Activity *Units: 4*

Pedagogical Courses (12 units)

- KIN 4004 - Elementary School Physical Education *Units: 4*
- KIN 4006 - Secondary School Physical Education *Units: 4*
- KIN 4090 - Computer Application in Kinesiology *Units: 4*

3. Field Experience (4 units)

- KIN 4031 - Professional Field Experience II *Units: 1-4*
(Must be taken concurrently with KIN 4004 and 4006)

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Kinesiology, Social Justice Option, B.S.

Program Description

Kinesiology is the disciplinary study of humans as they participate in physical activity. Professional applications offered by the department include Physical Activity Studies; Exercise, Nutrition, and Wellness; Therapeutic Studies; Social Justice; and Physical Education Teaching.

The purposes of the Department of Kinesiology are (1) to provide an opportunity for students to study the discipline of Kinesiology; and (2) to provide opportunities for learning and participation in a wide variety of motor activities. Such study includes an investigation into the nature of physical activity, how it is assessed, what its effects are upon the rest of human bodily systems, and how motor performance is learned. It also involves an investigation of the historical, cultural, philosophical, psychological, and social factors which result from and influence play, games, sports, and physical activity.

The department's program also offers courses appropriate to the general education curriculum of the university in the humanities, social sciences, sciences, and life-long learning. It provides the necessary foundation for students who wish to continue their own personal lifelong activities.

Student Learning Outcomes

Students graduating with a B.S. in Kinesiology from Cal State East Bay will be able to:

1. demonstrate the ability to synthesize and apply perspectives from the humanities, and the social-, behavioral-, and life-sciences (crossdisciplinary knowledge);
2. use disciplinary knowledge to design and implement innovative professional application (problem solving);
3. characterize thought processes by the exploration of discipline-relevant issues, ideas, artifacts, and events before accepting or formulating a perspective (critical thinking);
4. use contextually-grounded and compelling content to articulate physical activity issues in both oral and written form (communication skills), and
5. demonstrate professional dispositions - such as integrity, personal and cultural sensitivity, and collaboration - as well as commitment to social justice for physical activity participants when leading others in a kinesiology-relevant domain.

Career Opportunities

- Activities Director
- Allied Health Fields (Physical Therapy, Occupational Therapy, Chiropractic)
- Coach
- Community College Teacher
- Community Fitness Agency Director
- Exercise/Nutrition Counselor
- Physical Education Teacher
- University Instructor
- Wellness Specialist

Features

Many of the facilities are open to the campus community when not being used for classes. These may include swimming pools, tennis courts, handball courts, fitness center, the gymnasium, and outdoor fields.

Students enrolled in the intercollegiate athletic programs have the opportunity to engage in numerous field trips throughout California and, in some cases, in neighboring states. The intercollegiate athletic program includes: basketball, cross country, golf, soccer, and track for men and women; baseball for men; and softball, swimming, volleyball, and water polo for women.

There is one scholarship housed within the Department of Kinesiology. Recipients of the Joe Morgan Scholarship, named for the Hall of Fame baseball player who is a Cal State East Bay graduate, are identified each Winter with the award(s) applying to the subsequent year. The amount of the Joe Morgan award varies and multiple awards may be given.

Major Requirements (B.S.)

Consult your advisor for clarification and interpretation of major requirements. The major consists of 93-111 units; the B.S. degree requires a total of 180 units.

I. Lower Division Core (9 units)

Lower division requirements vary depending on the option, but the following two courses are required for every option:

- BIOL 2010 - Human Physiology and Anatomy I *Units: 5*
or BIOL 2011 (5)
- KIN 1610 - Introduction to Kinesiology *Units: 4*

II. Upper Division Core (45 units)

- KIN 3300 - Critical Inquiry in Kinesiology *Units: 5*
- KIN 3305 - Structural Kinesiology *Units: 4*
- KIN 3310 - Biomechanics *Units: 5*
- KIN 3320 - Exercise Physiology *Units: 5*
- KIN 3330 - Motor Learning and Control *Units: 5*

- KIN 3340 - Motor Development *Units: 4*
- KIN 3350 - Sport and Exercise Psychology *Units: 5*
- KIN 3701 - History of Physical Activity *Units: 4*
- KIN 3740 - Philosophical Foundations of Kinesiology *Units: 4*
- KIN 3750 - Sport in Contemporary Society *Units: 4*

III. Performance Requirements (6 units)

One beginning level course must be repeated at the intermediate level. Satisfactory completion in each of five categories; swimming, combatives, teams sports, individual or dual sports, and fitness activities.

IV. Option Requirements

(In addition to the lower and upper division Core requirements listed above, students must complete one of the following options.)

Note:

Students intending to pursue graduate studies in athletic training it is suggested to take KIN 4600 Athletic Training Practicum.

Students intending to pursue entry into a graduate Entry Level Athletic Education Training Program are strongly encouraged to examine prerequisites for the desired program.

Students intending to pursue a career in coaching are recommended to take:

- KIN 2600 Prevention and Care of Athletic Injuries;
- KIN 3600 Evaluation and Care of Athletic Injuries;
- KIN 3601 Athletic Training: Modalities and Rehabilitation; *and*
- KIN 4600 Athletic Training Practicum.

See the Single Subject Matter Preparation in Physical Education in the Programs of Study chapter.

Social Justice Option (44 units)

Kinesiology is a multidisciplinary field that explores human movement from the perspectives of the humanities and social, behavioral, and life sciences. This option would allow students to focus on issues related to social justice, sport, and physical activity. The major with this option totals 104 units.

1. Lower Division (4 units)

- KIN 2700 - Women and Sport *Units: 4*

2. Upper Division Requirements (8 units)

- KIN 3200 - Sport in Film: Cultural Perspectives *Units: 4*
- KIN 3735 - Sport, Racism, and Ethnicity *Units: 4*

3. Upper Division Electives (32 units)

Select 8 courses from at least 4 different departments listed below:

- ANTH 3750 - Women in Cross-Cultural Perspective *Units: 4*
- COMM 4610 - Rhetoric of Popular Culture *Units: 4*

- DANC 3300 - Sex, Race, and Body Politics in Dance *Units: 4*
- ES 3165 - African American Sexuality *Units: 4*
- ES 3265 - Latino/a Sexualities *Units: 4*
- ES 3551 Asian American Women and Men *Units: 4*
- ES 3710 - Racialized Masculinities *Units: 4*
- ES 3730 - Women of Color, Genders and Sexualities *Units: 4*
- ES 4300 - Queer of Color Subjects and Critical Theory *Units: 4*
- HIST 3572 - American Women in the Twentieth Century *Units: 4*
- HIST 3575 - Baseball in America *Units: 4*
- KIN 4008 - Adapted Physical Activity *Units: 4*
- PHIL 3502 - Social and Political Philosophy *Units: 4*
- PHIL 3510 - Human Rights and Social Justice: Cultural Groups and Women in the U.S. *Units: 4*
- PHIL 3511 - Philosophy of Human Rights and Global Justice *Units: 4*
- PHIL 3515 - Race and Social Justice *Units: 4*
- POSC 3333 - Ethnic and Minority Politics *Units: 4*
- POSC 3340 - Women and Politics *Units: 4*
- REC 4050 - Social Justice in Hospitality, Recreation and Tourism *Units: 4*
- SOC 3420 - Social Inequality *Units: 4*
- SOC 3425 - Prejudice and Discrimination *Units: 4*
- SOC 3411 - Sociology of Gender *Units: 4*
- SOC 3510 - Sociology of Identity *Units: 4*
- SOC 3520 - Sociology of Race and Ethnic Relations *Units: 4*
- THEA 1022 - Keeping It Real: How Race Matters in Pop Culture *Units: 4*
- THEA 3209 - Sex, Love, and Women on Stage and in Film *Units: 4*
- WOST 3500 Portrayal of Women in the Movies *Units: 4*
- WOST 3530 - Women and Their Bodies *Units: 4*
- WOST 3545 - Women's Health and Health Care *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Kinesiology, Special Studies Option, B.S.

Program Description

Kinesiology is the disciplinary study of humans as they participate in physical activity. Professional applications offered by the department include Physical Activity Studies; Exercise, Nutrition, and Wellness; Therapeutic Studies; Social Justice; and Physical Education Teaching.

The purposes of the Department of Kinesiology are (1) to provide an opportunity for students to study the discipline of Kinesiology; and (2) to provide opportunities for learning and participation in a wide variety of motor activities. Such study includes an investigation into the nature of physical activity, how it is assessed, what its effects are upon the rest of human bodily systems, and how motor performance is learned. It also involves an investigation of the historical, cultural, philosophical, psychological, and social factors which result from and influence play, games, sports, and physical activity.

The department's program also offers courses appropriate to the general education curriculum of the university in the humanities, social sciences, sciences, and life-long learning. It provides the necessary foundation for students who wish to continue their own personal lifelong activities.

Student Learning Outcomes

Students graduating with a B.S. in Kinesiology from Cal State East Bay will be able to:

1. demonstrate the ability to synthesize and apply perspectives from the humanities, and the social-, behavioral-, and life-sciences (crossdisciplinary knowledge);
2. use disciplinary knowledge to design and implement innovative professional application (problem solving);
3. characterize thought processes by the exploration of discipline-relevant issues, ideas, artifacts, and events before accepting or formulating a perspective (critical thinking);
4. use contextually-grounded and compelling content to articulate physical activity issues in both oral and written form (communication skills), and
5. demonstrate professional dispositions - such as integrity, personal and cultural sensitivity, and collaboration - as well as commitment to social justice for physical activity participants when leading others in a kinesiology-relevant domain.

Career Opportunities

- Activities Director
- Allied Health Fields (Physical Therapy, Occupational Therapy, Chiropractic)
- Coach
- Community College Teacher
- Community Fitness Agency Director
- Exercise/Nutrition Counselor
- Physical Education Teacher
- University Instructor
- Wellness Specialist

Features

Many of the facilities are open to the campus community when not being used for classes. These may include swimming pools, tennis courts, handball courts, fitness center, the gymnasium, and outdoor fields.

Students enrolled in the intercollegiate athletic programs have the opportunity to engage in numerous field trips throughout California and, in some cases, in neighboring states. The intercollegiate athletic program includes: basketball, cross country, golf, soccer, and track for men and women; baseball for men; and softball, swimming, volleyball, and water polo for women.

There is one scholarship housed within the Department of Kinesiology. Recipients of the Joe Morgan Scholarship, named for the Hall of Fame baseball player who is a Cal State East Bay graduate, are identified each Winter with the award(s) applying to the subsequent year. The amount of the Joe Morgan award varies and multiple awards may be given.

Major Requirements (B.S.)

Consult your advisor for clarification and interpretation of major requirements. The major consists of 93-111 units; the B.S. degree requires a total of 180 units.

I. Lower Division Core (9 units)

Lower division requirements vary depending on the option, but the following two courses are required for every option:

- BIOL 2010 - Human Physiology and Anatomy I *Units: 5*
or BIOL 2011 (5)
- KIN 1610 - Introduction to Kinesiology *Units: 4*

II. Upper Division Core (45 units)

- KIN 3300 - Critical Inquiry in Kinesiology *Units: 5*
- KIN 3305 - Structural Kinesiology *Units: 4*
- KIN 3310 - Biomechanics *Units: 5*

- KIN 3320 - Exercise Physiology *Units: 5*
- KIN 3330 - Motor Learning and Control *Units: 5*
- KIN 3340 - Motor Development *Units: 4*
- KIN 3350 - Sport and Exercise Psychology *Units: 5*
- KIN 3701 - History of Physical Activity *Units: 4*
- KIN 3740 - Philosophical Foundations of Kinesiology *Units: 4*
- KIN 3750 - Sport in Contemporary Society *Units: 4*

III. Performance Requirements (6 units)

One beginning level course must be repeated at the intermediate level. Satisfactory completion in each of five categories; swimming, combatives, teams sports, individual or dual sports, and fitness activities.

IV. Option Requirements

(In addition to the lower and upper division Core requirements listed above, students must complete one of the following options.)

Note:

Students intending to pursue graduate studies in athletic training it is suggested to take KIN 4600 Athletic Training Practicum.

Students intending to pursue entry into a graduate Entry Level Athletic Education Training Program are strongly encouraged to examine prerequisites for the desired program.

Students intending to pursue a career in coaching are recommended to take:

- KIN 2600 Prevention and Care of Athletic Injuries;
- KIN 3600 Evaluation and Care of Athletic Injuries;
- KIN 3601 Athletic Training: Modalities and Rehabilitation; *and*
- KIN 4600 Athletic Training Practicum.

See the Single Subject Matter Preparation in Physical Education in the Programs of Study chapter.

Special Studies Option (33 units minimum)

The Special Studies option provides students the opportunity to design an individualized course of study which focuses upon interdisciplinary topics or themes related to Kinesiology. A unique aspect of this option is the requirement of coursework outside the department which is related to sport and exercise phenomena (e.g., mass communication and sport, business management and fitness programs). The major with this option totals 93 units minimum.

All Special Studies option programs must receive approval from the department chair before coursework is initiated.

1. The following three courses must be completed (12 units):

- STAT 3050 - Statistics: from Data to Decisions *Units: 4* prerequisite: STAT 1000 or equivalent (5). STAT 3050 also satisfies GE Area B6.
- PHIL 3502 - Social and Political Philosophy *Units: 4* Also satisfies GE Area C4.
- ANTH 3750 - Women in Cross-Cultural Perspective *Units: 4* Also satisfies GE Area D4.

2. In addition,

students must complete 16 units of upper division Kinesiology classes.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Kinesiology, Therapeutic Studies Option, B.S.

Program Description

Kinesiology is the disciplinary study of humans as they participate in physical activity. Professional applications offered by the department include Physical Activity Studies; Exercise, Nutrition, and Wellness; Therapeutic Studies; Social Justice; and Physical Education Teaching.

The purposes of the Department of Kinesiology are (1) to provide an opportunity for students to study the discipline of Kinesiology; and (2) to provide opportunities for learning and participation in a wide variety of motor activities. Such study includes an investigation into the nature of physical activity, how it is assessed, what its effects are upon the rest of human bodily systems, and how motor performance is learned. It also involves an investigation of the historical, cultural, philosophical, psychological, and social factors which result from and influence play, games, sports, and physical activity.

The department's program also offers courses appropriate to the general education curriculum of the university in the humanities, social sciences, sciences, and life-long learning. It provides the necessary foundation for students who wish to continue their own personal lifelong activities.

Student Learning Outcomes

Students graduating with a B.S. in Kinesiology from Cal State East Bay will be able to:

1. demonstrate the ability to synthesize and apply perspectives from the humanities, and the social-, behavioral-, and life-sciences (crossdisciplinary knowledge);
2. use disciplinary knowledge to design and implement innovative professional application (problem solving);
3. characterize thought processes by the exploration of discipline-relevant issues, ideas, artifacts, and events before accepting or formulating a perspective (critical thinking);
4. use contextually-grounded and compelling content to articulate physical activity issues in both oral and written form (communication skills), and
5. demonstrate professional dispositions - such as integrity, personal and cultural sensitivity, and collaboration - as well as commitment to social justice for physical activity participants when leading others in a kinesiology-relevant domain.

Career Opportunities

- Activities Director
- Allied Health Fields (Physical Therapy, Occupational Therapy, Chiropractic)
- Coach
- Community College Teacher
- Community Fitness Agency Director
- Exercise/Nutrition Counselor
- Physical Education Teacher
- University Instructor
- Wellness Specialist

Features

Many of the facilities are open to the campus community when not being used for classes. These may include swimming pools, tennis courts, handball courts, fitness center, the gymnasium, and outdoor fields.

Students enrolled in the intercollegiate athletic programs have the opportunity to engage in numerous field trips throughout California and, in some cases, in neighboring states. The intercollegiate athletic program includes: basketball, cross country, golf, soccer, and track for men and women; baseball for men; and softball, swimming, volleyball, and water polo for women.

There is one scholarship housed within the Department of Kinesiology. Recipients of the Joe Morgan Scholarship, named for the Hall of Fame baseball player who is a Cal State East Bay graduate, are identified each Winter with the award(s) applying to the subsequent year. The amount of the Joe Morgan award varies and multiple awards may be given.

Major Requirements (B.S.)

Consult your advisor for clarification and interpretation of major requirements. The major consists of 93-111 units; the B.S. degree requires a total of 180 units.

I. Lower Division Core (9 units)

Lower division requirements vary depending on the option, but the following two courses are required for every option:

- BIOL 2010 - Human Physiology and Anatomy I *Units: 5*
or BIOL 2011 (5)
- KIN 1610 - Introduction to Kinesiology *Units: 4*

II. Upper Division Core (45 units)

- KIN 3300 - Critical Inquiry in Kinesiology *Units: 5*
- KIN 3305 - Structural Kinesiology *Units: 4*
- KIN 3310 - Biomechanics *Units: 5*
- KIN 3320 - Exercise Physiology *Units: 5*
- KIN 3330 - Motor Learning and Control *Units: 5*
- KIN 3340 - Motor Development *Units: 4*
- KIN 3350 - Sport and Exercise Psychology *Units: 5*
- KIN 3701 - History of Physical Activity *Units: 4*
- KIN 3740 - Philosophical Foundations of Kinesiology *Units: 4*
- KIN 3750 - Sport in Contemporary Society *Units: 4*

III. Performance Requirements (6 units)

One beginning level course must be repeated at the intermediate level. Satisfactory completion in each of five categories; swimming, combatives, teams sports, individual or dual sports, and fitness activities.

IV. Option Requirements

(In addition to the lower and upper division Core requirements listed above, students must complete one of the following options.)

Note:

Students intending to pursue graduate studies in athletic training it is suggested to take KIN 4600 Athletic Training Practicum.

Students intending to pursue entry into a graduate Entry Level Athletic Education Training Program are strongly encouraged to examine prerequisites for the desired program.

Students intending to pursue a career in coaching are recommended to take:

- KIN 2600 Prevention and Care of Athletic Injuries;
- KIN 3600 Evaluation and Care of Athletic Injuries;

- KIN 3601 Athletic Training: Modalities and Rehabilitation; *and*
- KIN 4600 Athletic Training Practicum.

See the **Single Subject Matter Preparation in Physical Education in the Programs of Study** chapter.

Therapeutic Studies Option (51 units)

The Therapeutic Studies Option satisfies the majority of, if not all, the prerequisite coursework needed to gain admission to various schools of Physical Therapy, Occupational Therapy, and Chiropractic, as well as other allied health fields, such as Athletic Training. It is always advisable to check with desired schools for specific requirements. The major with this option totals 111 units.

1. Lower Division (42 units)

- BIOL 1401 - Molecular and Cellular Biology *Units: 5*
- BIOL 1403 - Animal Biology *Units: 5*
- BIOL 2020 - Human Physiology and Anatomy II *Units: 5*
- CHEM 1101 - General Chemistry *Units: 5*
- CHEM 1102 - General Chemistry *Units: 5*
- CHEM 1103 - General Chemistry *Units: 5*
- PHYS 2701 - Introductory Physics: Force, Mass and Motion *Units: 4*
- PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*
- PHYS 2703 - Introductory Physics: Light and Modern Physics *Units: 4*

2. Upper Division (9 units)

- KIN 3600 - Evaluation and Care of Athletic Injuries *Units: 5*
- KIN 4030 - Professional Field Experience I *Units: 1-4*
or
- KIN 4031 - Professional Field Experience II *Units: 1-4*

Professional graduate programs in the Allied Health Fields may require:

additional classes. Most schools of Physical Therapy also require a course in abnormal psychology. Additional courses that may be useful:

- BIOL 2025 - Introduction to Microbiology *Units: 5*
- BIOL 4160 - Medical Physiology *Units: 4*
- CHEM 2301 - Survey of Organic Chemistry *Units: 4*
- KIN 3601 - Athletic Training: Modalities and Rehabilitation *Units: 4*
- KIN 4008 - Adapted Physical Activity *Units: 4*
- KIN 4330 - Clinical Exercise Physiology *Units: 4*
- KIN 4610 - Exercise Prescription *Units: 4*
- KIN 4615 - Exercise and Stress *Units: 4*
- PSYC 4420 - Developmental Psychology *Units: 4*
- STAT 1000 - Elements of Probability and Statistics *Units: 5*
- STAT 3031 - Statistical Methods in Biology *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S.

Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Liberal Studies, Childhood Studies Option, B.A

Program Description

The Liberal Studies Major aims to provide a rich educational experience through coursework in a broad range of academic disciplines. The student is guaranteed a breadth of academic experience, as well as depth in a single field. The Bachelors Plus Early Pathway (BPEP) Liberal Studies/Credential Program offers selected students interested in a teaching career an opportunity for concurrent subject matter and professional preparation. See the "Bachelors Plus Early Pathway Liberal Studies/Credential Program" section later in this chapter.

The broad-based, interdisciplinary nature of Liberal Studies provides a knowledge base and the communication and analytical skills appropriate to many careers and occupations. Hence, the Liberal Studies major is excellent preparation not only for teaching, but for graduate work, for law school, and for employment in business and government.

Student Learning Outcomes

Students graduating with a B.A. in Liberal Studies from Cal State East Bay will be able to:

1. apply the broad knowledge of an educated generalist and the critical methods of different disciplines to contemporary issues of self, society, and nature;
2. demonstrate deep understanding of the principles and methods of one specialized subject area or discipline;
3. communicate ideas clearly and persuasively orally and in writing;
4. demonstrate independent thinking tempered by respect for others and the environment;
5. work individually and collaboratively to promote social justice through an appreciation of diversity and a commitment to democratic values.

Career Opportunities

- Administrator
- Business Executive
- Civil Servant
- Customer Service Representative
- Foreign Service Officer
- Human Resources Administrator
- Journalist
- Lawyer
- Manager
- Personnel Representative
- Salesperson
- Stockbroker
- Teacher (K-6)
- Writer

Features

The primary function of the Liberal Studies Office is to provide proper advising for completing the major. Friendly, experienced office staff, including two full-time academic advisors, are available to help at every step. Advising is available through individual appointments and on a "drop-in" basis.

Although the Liberal Studies Teacher Preparation Degree Pathway is a multiple subject matter preparation program, there is no longer an exemption from the multiple subject test, which is now the CSET or "California Subject Exam for Teachers" (no longer the MSAT). The Liberal Studies Teacher Preparation Degree Pathway is aligned with Content Standards for K-6 curriculum and the CSET, and is, therefore, the best preparation for future K-6 teachers.

The Liberal Studies major is offered both day and evening, and on both the Hayward and Concord Campuses. However, Concord Campus and evening-only students may not find a full range of courses and options available to them.

Liberal Studies is also one of the majors available through the Cal State East Bay Program for Accelerated College Education (PACE). For information on PACE, see the PACE section of the College and Department Information chapter of this catalog or call the PACE office at (510) 885-PACE (7223).

Major Requirements (B.A.)

The major with the Liberal Arts pathway consists of 92 units. The major with the Teacher Preparation pathway consists of a minimum of 144 units. The B.A. degree requires a minimum of 180 units. The Core Curriculum includes upper-division GE requirements in Areas C4 and D4. Students must be certain to meet with a GE advisor to select courses satisfying all other GE breadth requirements.

I. Core Curriculum (20 units)

All Liberal Studies students must complete the following courses. The Liberal Studies Core Curriculum satisfies Upper Division GE requirements in Humanities, Area C4 and Social Sciences, Area D4.

- ANTH 3000 - Anthropology in the Modern World *Units: 4* (Area D4)
- ENGL 3020 - Advanced Expository Writing *Units: 4*

- HDEV 4110 - Child Cognitive Development *Units: 4*
or
- HDEV 4130 - The Social Development of Children *Units: 4*

- HIST 3400 - America to 1900 *Units: 4*
or
- HIST 3017 - The Twentieth Century *Units: 4* (Area C4)

- MUS 3002 - What to Listen for in Music *Units: 4* (Area C4)
or
- THEA 3225 - Theatre Today *Units: 4* (Area C1 or C4)

II. Degree Pathway Requirements

The Liberal Studies Major offers two different pathways to degree completion. Majors must choose either the Teacher Preparation pathway or the Liberal Arts pathway.

A. Teacher Preparation Degree Pathway (120 units minimum)

Students selecting the Teacher Preparation Degree Pathway must complete the following two components:

1. Required Courses (102-103 units)

Note: As some of these courses may also be used to satisfy GE requirements, please consult with a Liberal Studies Advisor when selecting courses to ensure the most efficient progress toward degree completion.

- ART 1020 - The Creative Process *Units: 4*
- BIOL 1000 - Basic Concepts in Biology *Units: 5*
- CHEM 1100 - Introduction to College Chemistry *Units: 5*

- DANC 3021 Cultural Dance Forms *Units: 3*
or
- DANC 3235 - Dance for Children *Units: 4*

- ENGL 3010 - Modern English Grammar *Units: 4*
or
- ENGL 2005 - Grammar for Writers *Units: 4*
- Any Upper Division English Literature *Units: 4*
- GEOG 2300 - Cultural Geography *Units: 4*
or
- GEOG 3505 - Geography of California *Units: 4* (Area D4)
- GEOL 1000 - Earth Systems Science *Units: 5*
- HDEV 4120 - Child Language Development *Units: 4*
or
- ANTH 3800 - Language and Culture *Units: 4* (Area D4)
- HDEV 4150 - Children in Families and Communities *Units: 4*
or
- HDEV 3301 - Child Development *Units: 4*
- HIST 1014 - World Civilizations I *Units: 4*
- HIST 1015 - World Civilizations II *Units: 4*
- HIST 3500 - History of California *Units: 4*
- HSC 1100 - Health: Maintenance of Wellness *Units: 4*
- KIN 3251 - Physical Education for the Classroom Teacher: Physical Considerations *Units: 4*
- KIN 3252 - Physical Education for the Classroom Teacher: Psycho-Social Considerations *Units: 4*
- MATH 2011 - Number Systems *Units: 4*
- MATH 4012 - Geometry and Measurement *Units: 4*
- MATH 4013 - Statistics, Data Analysis, and Probability *Units: 4*
- MATH 4014 - Algebra and Functions *Units: 4*
- PHYS 1700 - Elementary Physics *Units: 4*
- PHYS 1780 - Elementary Physics Laboratory *Units: 1*
- SOC 1000 - Introduction to Sociology *Units: 4*
or
- any SOC course not used in minor *Units: 4*
- TED 3001 - Exploring Education *Units: 3*
- THEA 3650 - Dramatic Activities for Children *Units: 4*
or
- MUS 3002 - What to Listen for in Music *Units: 4*

One of the following:

- ENGL 2030 - Introduction to Critical Writing on Prose Fiction *Units: 4*
- ENGL 2040 - Introduction to Critical Writing on Poetry *Units: 4*
- ENGL 2050 - Introduction to Critical Writing on Drama *Units: 4*

2. Depth of Study (18 units minimum)

This requirement may be satisfied by completing one of the methods listed below. In each of the following options, at least 18 units must be unique to the Depth of Study and may not be counted in any other areas of the Liberal Studies Major:

- a. Complete any Minor offered by the university

b. Complete one of the following approved options:

i. Childhood Studies (18-20 units, see below)

ii. Special Education (22-25 units, see below)

iii. Studies in Education (For BPEP students only) (20 units, see below)

c. With the approval of the Liberal Studies Director, students may create a special option (18 unit minimum)

B. Liberal Arts Degree Pathway (72 unit minimum)

Students selecting the Liberal Arts Degree Pathway must complete the following two components:

1. Liberal Studies Area Electives (48 units)

Through consultation with Liberal Studies advisors, select 12 units of electives from each of the four areas listed below. At least 32 of the 48 Area Elective units must be from upper division courses numbered 3000 or higher. Courses used to satisfy Liberal Studies Area Electives **MUST** be approved by a Liberal Studies Advisor. No more than two courses from a single discipline may be taken within a single area:

Area 1:

Social Sciences (Anthropology, Communications, Criminal Justice Administration, Geography, History, Political Science, Psychology, Sociology)

Area 2:

Natural Sciences/Mathematics (Biology, Chemistry, Geology, Math, Physics, Statistics)

Area 3:

Humanities (Art, English, Modern Languages, Music, Philosophy, Theater/Dance)

Area 4:

Interdisciplinary Studies (Ethnic Studies, Health Sciences, Human Development, International Studies, Kinesiology/PE, Latin American Studies, Recreation, Teacher Education, Women's Studies)

2. Depth of Study (24 units)

This requirement may be satisfied by completing one of the methods listed below. In each of the following options, at least 24 units must be unique to the Depth of Study and may not be counted in any other areas of the Liberal Studies Major:

a. Students may complete any Minor program offered by the university;

b. Students may complete one of the following options:

i. Organizational Leadership (28 units, see below)

ii. Special Education (22-25 units, see below)

c. With the approval of the Liberal Studies Director, students may create a Special Option of at least 24 units.

III. Approved Options for the Liberal Studies Major

Childhood Studies Option (18-20 units)

- HDEV 3301 - Child Development *Units: 4*
or
- HDEV 4150 - Children in Families and Communities *Units: 4*

- HDEV 4110 - Child Cognitive Development *Units: 4*
or
- HDEV 4130 - The Social Development of Children *Units: 4*

One of the following (4 units):

- DANC 3235 - Dance for Children *Units: 4*
- ENGL 4740 - History of Children's Literature *Units: 4*
- TED 4320 - Art Skills for Teachers *Units: 4*
- THEA 3650 - Dramatic Activities for Children *Units: 4*

One of the following (3 or 4 units):

- ANTH 3740 Cross Cultural Studies in Child Rearing *Units: 4*
- HDEV 4140 - Theories of Childhood *Units: 4*
- SOC 3410 - Sociology of the Family *Units: 4*

One of the following (3 or 4 units):

- PHIL 3701 - Philosophy of Education *Units: 4*
- PSYC 4440 - Child Psychopathology *Units: 4*
- TED 5351 - Psychological Foundations of Education and Planning for Instruction *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Liberal Studies, Organizational Leadership Option, B.A

Program Description

The Liberal Studies Major aims to provide a rich educational experience through coursework in a broad range of academic disciplines. The student is guaranteed a breadth of academic experience, as well as depth in a single field. The Bachelors Plus Early Pathway (BPEP) Liberal Studies/Credential Program offers selected students interested in a teaching career an opportunity for concurrent subject matter and professional preparation. See the "Bachelors Plus Early Pathway Liberal Studies/Credential Program" section later in this chapter.

The broad-based, interdisciplinary nature of Liberal Studies provides a knowledge base and the communication and analytical skills appropriate to many careers and occupations. Hence, the Liberal Studies major is excellent preparation not only for teaching, but for graduate work, for law school, and for employment in business and government.

Student Learning Outcomes

Students graduating with a B.A. in Liberal Studies from Cal State East Bay will be able to:

1. apply the broad knowledge of an educated generalist and the critical methods of different disciplines to contemporary issues of self, society, and nature;
2. demonstrate deep understanding of the principles and methods of one specialized subject area or discipline;
3. communicate ideas clearly and persuasively orally and in writing;
4. demonstrate independent thinking tempered by respect for others and the environment;
5. work individually and collaboratively to promote social justice through an appreciation of diversity and a commitment to democratic values.

Career Opportunities

- Administrator
- Business Executive
- Civil Servant
- Customer Service Representative
- Foreign Service Officer
- Human Resources Administrator
- Journalist
- Lawyer
- Manager
- Personnel Representative
- Salesperson
- Stockbroker
- Teacher (K-6)
- Writer

Features

The primary function of the Liberal Studies Office is to provide proper advising for completing the major. Friendly, experienced office staff, including two full-time academic advisors, are available to help at every step. Advising is available through individual appointments and on a "drop-in" basis.

Although the Liberal Studies Teacher Preparation Degree Pathway is a multiple subject matter preparation program, there is no longer an exemption from the multiple subject test, which is now the CSET or "California Subject Exam for Teachers" (no longer the MSAT). The Liberal Studies Teacher Preparation Degree Pathway is aligned with Content Standards for K-6 curriculum and the CSET, and is, therefore, the best preparation for future K-6 teachers.

The Liberal Studies major is offered both day and evening, and on both the Hayward and Concord Campuses. However, Concord Campus and evening-only students may not find a full range of courses and options available to them.

Liberal Studies is also one of the majors available through the Cal State East Bay Program for Accelerated College Education (PACE). For information on PACE, see the PACE section of the College and Department Information chapter of this catalog or call the PACE office at (510) 885-PACE (7223).

Major Requirements (B.A.)

The major with the Liberal Arts pathway consists of 92 units. The major with the Teacher Preparation pathway consists of a minimum of 144 units. The B.A. degree requires a minimum of 180 units. The Core Curriculum includes upper-division GE requirements in Areas C4 and D4. Students must be certain to meet with a GE advisor to select courses satisfying all other GE breadth requirements.

I. Core Curriculum (20 units)

All Liberal Studies students must complete the following courses. The Liberal Studies Core Curriculum satisfies Upper Division GE requirements in Humanities, Area C4 and Social Sciences, Area D4.

- ANTH 3000 - Anthropology in the Modern World *Units: 4* (Area D4)
- ENGL 3020 - Advanced Expository Writing *Units: 4*
- HDEV 4110 - Child Cognitive Development *Units: 4*
or
- HDEV 4130 - The Social Development of Children *Units: 4*
- HIST 3400 - America to 1900 *Units: 4*
or
- HIST 3017 - The Twentieth Century *Units: 4* (Area C4)
- MUS 3002 - What to Listen for in Music *Units: 4* (Area C4)
or
- THEA 3225 - Theatre Today *Units: 4* (Area C1 or C4)

II. Degree Pathway Requirements

The Liberal Studies Major offers two different pathways to degree completion. Majors must choose either the Teacher Preparation pathway or the Liberal Arts pathway.

A. Teacher Preparation Degree Pathway (120 units minimum)

Students selecting the Teacher Preparation Degree Pathway must complete the following two components:

1. Required Courses (102-103 units)

Note: As some of these courses may also be used to satisfy GE requirements, please consult with a Liberal Studies Advisor when selecting courses to ensure the most efficient progress toward degree completion.

- ART 1020 - The Creative Process *Units: 4*
- BIOL 1000 - Basic Concepts in Biology *Units: 5*
- CHEM 1100 - Introduction to College Chemistry *Units: 5*
- DANC 3021 Cultural Dance Forms *Units: 3*
or
- DANC 3235 - Dance for Children *Units: 4*
- ENGL 3010 - Modern English Grammar *Units: 4*
or
- ENGL 2005 - Grammar for Writers *Units: 4*
- Any Upper Division English Literature *Units: 4*
- GEOG 2300 - Cultural Geography *Units: 4*
or
- GEOG 3505 - Geography of California *Units: 4* (Area D4)
- GEOL 1000 - Earth Systems Science *Units: 5*
- HDEV 4120 - Child Language Development *Units: 4*
or
- ANTH 3800 - Language and Culture *Units: 4* (Area D4)
- HDEV 4150 - Children in Families and Communities *Units: 4*
or

- HDEV 3301 - Child Development *Units: 4*
- HIST 1014 - World Civilizations I *Units: 4*
- HIST 1015 - World Civilizations II *Units: 4*
- HIST 3500 - History of California *Units: 4*
- HSC 1100 - Health: Maintenance of Wellness *Units: 4*
- KIN 3251 - Physical Education for the Classroom Teacher: Physical Considerations *Units: 4*
- KIN 3252 - Physical Education for the Classroom Teacher: Psycho-Social Considerations *Units: 4*
- MATH 2011 - Number Systems *Units: 4*
- MATH 4012 - Geometry and Measurement *Units: 4*
- MATH 4013 - Statistics, Data Analysis, and Probability *Units: 4*
- MATH 4014 - Algebra and Functions *Units: 4*
- PHYS 1700 - Elementary Physics *Units: 4*
- PHYS 1780 - Elementary Physics Laboratory *Units: 1*

- SOC 1000 - Introduction to Sociology *Units: 4*
or
- any SOC course not used in minor *Units: 4*

- TED 3001 - Exploring Education *Units: 3*

- THEA 3650 - Dramatic Activities for Children *Units: 4*
or
- MUS 3002 - What to Listen for in Music *Units: 4*

One of the following:

- ENGL 2030 - Introduction to Critical Writing on Prose Fiction *Units: 4*
- ENGL 2040 - Introduction to Critical Writing on Poetry *Units: 4*
- ENGL 2050 - Introduction to Critical Writing on Drama *Units: 4*

2. Depth of Study (18 units minimum)

This requirement may be satisfied by completing one of the methods listed below. In each of the following options, at least 18 units must be unique to the Depth of Study and may not be counted in any other areas of the Liberal Studies Major:

- a. Complete any Minor offered by the university
- b. Complete one of the following approved options:
 - i. Childhood Studies (18-20 units, see below)
 - ii. Special Education (22-25 units, see below)
 - iii. Studies in Education (For BPEP students only) (20 units, see below)
- c. With the approval of the Liberal Studies Director, students may create a special option (18 unit minimum)

B. Liberal Arts Degree Pathway (72 unit minimum)

Students selecting the Liberal Arts Degree Pathway must complete the following two components:

1. Liberal Studies Area Electives (48 units)

Through consultation with Liberal Studies advisors, select 12 units of electives from each of the four areas listed below. At least 32 of the 48 Area Elective units must be from upper division courses numbered 3000 or higher. Courses used to satisfy Liberal Studies Area Electives MUST be approved by a Liberal Studies Advisor. No more than two courses from a single discipline may be taken within a single area:

Area 1:

Social Sciences (Anthropology, Communications, Criminal Justice Administration, Geography, History, Political Science, Psychology, Sociology)

Area 2:

Natural Sciences/Mathematics (Biology, Chemistry, Geology, Math, Physics, Statistics)

Area 3:

Humanities (Art, English, Modern Languages, Music, Philosophy, Theater/Dance)

Area 4:

Interdisciplinary Studies (Ethnic Studies, Health Sciences, Human Development, International Studies, Kinesiology/PE, Latin American Studies, Recreation, Teacher Education, Women's Studies)

2. Depth of Study (24 units)

This requirement may be satisfied by completing one of the methods listed below. In each of the following options, at least 24 units must be unique to the Depth of Study and may not be counted in any other areas of the Liberal Studies Major:

- a. Students may complete any Minor program offered by the university;
- b. Students may complete one of the following options:
 - i. Organizational Leadership (28 units, see below)
 - ii. Special Education (22-25 units, see below)
- c. With the approval of the Liberal Studies Director, students may create a Special Option of at least 24 units.

III. Approved Options for the Liberal Studies Major

Organizational Leadership Option (28 units)

1. Required (12 units)

- MGMT 3600 - Theories of Management *Units: 4*
- MGMT 3614 - Organizational Behavior *Units: 4*
or
- PUAD 4830 - Organization Theory and Human Behavior *Units: 4*
- MGMT 4500 - Business, Government, and Society *Units: 4*
or
- POSC 3419 - Labor Policy and Law *Units: 4*

2. Electives (16 units)

Group I (4 units)

Select one from the following:

- COMM 3530 - Interviewing Principles and Practices *Units: 4*
- MKTG 3495 - Business Communication *Units: 4*

Group II (12 units, at least 8 units must be upper division)

Please consult with your advisor for a current list of acceptable courses.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Liberal Studies, Special Education Option, B.A

Program Description

The Liberal Studies Major aims to provide a rich educational experience through coursework in a broad range of academic disciplines. The student is guaranteed a breadth of academic experience, as well as depth in a single field. The Bachelors Plus Early Pathway (BPEP) Liberal Studies/Credential Program offers selected students interested in a teaching career an opportunity for concurrent subject matter and professional preparation. See the "Bachelors Plus Early Pathway Liberal Studies/Credential Program" section later in this chapter.

The broad-based, interdisciplinary nature of Liberal Studies provides a knowledge base and the communication and analytical skills appropriate to many careers and occupations. Hence, the Liberal Studies major is excellent preparation not only for teaching, but for graduate work, for law school, and for employment in business and government.

Student Learning Outcomes

Students graduating with a B.A. in Liberal Studies from Cal State East Bay will be able to:

1. apply the broad knowledge of an educated generalist and the critical methods of different disciplines to contemporary issues of self, society, and nature;
2. demonstrate deep understanding of the principles and methods of one specialized subject area or discipline;
3. communicate ideas clearly and persuasively orally and in writing;
4. demonstrate independent thinking tempered by respect for others and the environment;
5. work individually and collaboratively to promote social justice through an appreciation of diversity and a commitment to democratic values.

Career Opportunities

- Administrator
- Business Executive
- Civil Servant
- Customer Service Representative
- Foreign Service Officer
- Human Resources Administrator
- Journalist
- Lawyer

- Manager
- Personnel Representative
- Salesperson
- Stockbroker
- Teacher (K-6)
- Writer

Features

The primary function of the Liberal Studies Office is to provide proper advising for completing the major. Friendly, experienced office staff, including two full-time academic advisors, are available to help at every step. Advising is available through individual appointments and on a "drop-in" basis.

Although the Liberal Studies Teacher Preparation Degree Pathway is a multiple subject matter preparation program, there is no longer an exemption from the multiple subject test, which is now the CSET or "California Subject Exam for Teachers" (no longer the MSAT). The Liberal Studies Teacher Preparation Degree Pathway is aligned with Content Standards for K-6 curriculum and the CSET, and is, therefore, the best preparation for future K-6 teachers.

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Liberal Studies is also one of the majors available through the Cal State East Bay Program for Accelerated College Education (PACE). For information on PACE, see the PACE section of the College and Department Information chapter of this catalog or call the PACE office at (510) 885-PACE (7223).

Major Requirements (B.A.)

The major with the Liberal Arts pathway consists of 92 units. The major with the Teacher Preparation pathway consists of a minimum of 144 units. The B.A. degree requires a minimum of 180 units. The Core Curriculum includes upper-division GE requirements in Areas C4 and D4. Students must be certain to meet with a GE advisor to select courses satisfying all other GE breadth requirements.

I. Core Curriculum (20 units)

All Liberal Studies students must complete the following courses. The Liberal Studies Core Curriculum satisfies Upper Division GE requirements in Humanities, Area C4 and Social Sciences, Area D4.

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- HDEV 4110 - Child Cognitive Development *Units: 4*
or
- HDEV 4130 - The Social Development of Children *Units: 4*
- HIST 3400 - America to 1900 *Units: 4*
or
- HIST 3017 - The Twentieth Century *Units: 4* (Area C4)
- MUS 3002 - What to Listen for in Music *Units: 4* (Area C4)
or
- THEA 3225 - Theatre Today *Units: 4* (Area C1 or C4)

II. Degree Pathway Requirements

The Liberal Studies Major offers two different pathways to degree completion. Majors must choose either the Teacher Preparation pathway or the Liberal Arts pathway.

A. Teacher Preparation Degree Pathway (120 units minimum)

Students selecting the Teacher Preparation Degree Pathway must complete the following two components:

1. Required Courses (102-103 units)

Note: As some of these courses may also be used to satisfy GE requirements, please consult with a Liberal Studies Advisor when selecting courses to ensure the most efficient progress toward degree completion.

- ART 1020 - The Creative Process *Units: 4*
- BIOL 1000 - Basic Concepts in Biology *Units: 5*
- CHEM 1100 - Introduction to College Chemistry *Units: 5*

- DANC 3021 Cultural Dance Forms *Units: 3*
or
- DANC 3235 - Dance for Children *Units: 4*

- ENGL 3010 - Modern English Grammar *Units: 4*
or
- ENGL 2005 - Grammar for Writers *Units: 4*

- Any Upper Division English Literature *Units: 4*

- GEOG 2300 - Cultural Geography *Units: 4*
or
- GEOG 3505 - Geography of California *Units: 4* (Area D4)

- GEOL 1000 - Earth Systems Science *Units: 5*

- HDEV 4120 - Child Language Development *Units: 4*
or
- ANTH 3800 - Language and Culture *Units: 4* (Area D4)

- HDEV 4150 - Children in Families and Communities *Units: 4*
or
- HDEV 3301 - Child Development *Units: 4*

- HIST 1014 - World Civilizations I *Units: 4*
- HIST 1015 - World Civilizations II *Units: 4*
- HIST 3500 - History of California *Units: 4*
- HSC 1100 - Health: Maintenance of Wellness *Units: 4*
- KIN 3251 - Physical Education for the Classroom Teacher: Physical Considerations *Units: 4*
- KIN 3252 - Physical Education for the Classroom Teacher: Psycho-Social Considerations *Units: 4*
- MATH 2011 - Number Systems *Units: 4*
- MATH 4012 - Geometry and Measurement *Units: 4*
- MATH 4013 - Statistics, Data Analysis, and Probability *Units: 4*
- MATH 4014 - Algebra and Functions *Units: 4*
- PHYS 1700 - Elementary Physics *Units: 4*
- PHYS 1780 - Elementary Physics Laboratory *Units: 1*

- SOC 1000 - Introduction to Sociology *Units: 4*
or
- any SOC course not used in minor *Units: 4*

- TED 3001 - Exploring Education *Units: 3*

- THEA 3650 - Dramatic Activities for Children *Units: 4*
or
- MUS 3002 - What to Listen for in Music *Units: 4*

One of the following:

- ENGL 2030 - Introduction to Critical Writing on Prose Fiction *Units: 4*
- ENGL 2040 - Introduction to Critical Writing on Poetry *Units: 4*
- ENGL 2050 - Introduction to Critical Writing on Drama *Units: 4*

2. Depth of Study (18 units minimum)

This requirement may be satisfied by completing one of the methods listed below. In each of the following options, at least 18 units must be unique to the Depth of Study and may not be counted in any other areas of the Liberal Studies Major:

a. Complete any Minor offered by the university

b. Complete one of the following approved options:

i. Childhood Studies (18-20 units, see below)

ii. Special Education (22-25 units, see below)

iii. Studies in Education (For BPEP students only) (20 units, see below)

c. With the approval of the Liberal Studies Director, students may create a special option (18 unit minimum)

B. Liberal Arts Degree Pathway (72 unit minimum)

Students selecting the Liberal Arts Degree Pathway must complete the following two components:

1. Liberal Studies Area Electives (48 units)

Through consultation with Liberal Studies advisors, select 12 units of electives from each of the four areas listed below. At least 32 of the 48 Area Elective units must be from upper division courses numbered 3000 or higher. Courses used to satisfy Liberal Studies Area Electives **MUST** be approved by a Liberal Studies Advisor. No more than two courses from a single discipline may be taken within a single area:

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Area 2:

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Area 3:

Humanities (Art, English, Modern Languages, Music, Philosophy, Theater/Dance)

Area 4:

Interdisciplinary Studies (Ethnic Studies, Health Sciences, Human Development, International Studies, Kinesiology/PE, Latin American Studies, Recreation, Teacher Education, Women's Studies)

2. Depth of Study (24 units)

This requirement may be satisfied by completing one of the methods listed below. In each of the following options, at least 24 units must be unique to the Depth of Study and may not be counted in any other areas of the Liberal Studies Major:

- a. Students may complete any Minor program offered by the university;
- b. Students may complete one of the following options:
 - i. Organizational Leadership (28 units, see below)
 - ii. Special Education (22-25 units, see below)
- c. With the approval of the Liberal Studies Director, students may create a Special Option of at least 24 units.

III. Approved Options for the Liberal Studies Major

Special Education Option (22-25 units)

- EPSY 5021 - Introduction to Educating all Students in Diverse Classrooms *Units: 4*
- EPSY 5125 - Educational Practices: Mild-Moderate Disabilities *Units: 4*
- EPSY 5126 - Special Education Law and Program Design *Units: 4*
- EPSY 5136 - Educational Practices: Moderate-Severe Disabilities *Units: 4*

- TED 3001 - Exploring Education *Units: 3*
or
- 50 hours of documented experience in a special education setting.

Select 6-9 units from at least two of the following groups:

(6-9 units for students on the Teacher Preparation track; students on the Liberal Arts track must take at least 8 units to meet their Depth of Study requirement)

Group 1:

- SPPA 3852 - Speech, Language and Communication Development Across the Lifespan *Units: 4*
- SPPA 3855 - Phonetics *Units: 4*
- SPPA 3856 - Observation of Clinical Procedures in Communicative Disorders *Units: 2*
- SPPA 3859 - Theory and Practice of Audiology I *Units: 4*
- SPPA 4861 - Hearing Assessment: Instrumentation and Behavioral *Units: 5*
- SPPA 4863 - Articulation and Phonological Disorders *Units: 4*
- SPPA 4865 - Language Disorders in Children *Units: 4*

Group 2:

- DANC 3235 - Dance for Children *Units: 4*
- KIN 3305 - Structural Kinesiology *Units: 4*

- (Prerequisite: BIOL 2010 - Human Physiology and Anatomy I *Units: 5*
or
- BIOL 2011 - Anatomy and Physiology I *Units: 5*)

- KIN 4008 - Adapted Physical Activity *Units: 4*
- REC 4600 - Recreation Therapy Documentation and Assessment *Units: 4*
- REC 4601 - Recreation Therapy Treatment and Program Planning *Units: 4*

Group 3:

- HDEV 3301 - Child Development *Units: 4*
- HDEV 3800 - Human Development and Interaction *Units: 4*
- HDEV 4110 - Child Cognitive Development *Units: 4*
- HDEV 4120 - Child Language Development *Units: 4*
- HDEV 4150 - Children in Families and Communities *Units: 4*
- PSYC 4345 - Sensation and Perception *Units: 4*
- PSYC 4410 - Abnormal Psychology *Units: 4*
- PSYC 4420 - Developmental Psychology *Units: 4*
- SOC 4750 - Child Welfare *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Liberal Studies, Studies in Education Option, B.A

Program Description

The Liberal Studies Major aims to provide a rich educational experience through coursework in a broad range of academic disciplines. The student is guaranteed a breadth of academic experience, as well as depth in a single field. The Bachelors Plus Early Pathway (BPEP) Liberal Studies/Credential Program offers selected students interested in a teaching career an opportunity for concurrent subject matter and professional preparation. See the "Bachelors Plus Early Pathway Liberal Studies/Credential Program" section later in this chapter.

The broad-based, interdisciplinary nature of Liberal Studies provides a knowledge base and the communication and analytical skills appropriate to many careers and occupations. Hence, the Liberal Studies major is excellent preparation not only for teaching, but for graduate work, for law school, and for employment in business and government.

Student Learning Outcomes

Students graduating with a B.A. in Liberal Studies from Cal State East Bay will be able to:

1. apply the broad knowledge of an educated generalist and the critical methods of different disciplines to contemporary issues of self, society, and nature;
2. demonstrate deep understanding of the principles and methods of one specialized subject area or discipline;
3. communicate ideas clearly and persuasively orally and in writing;
4. demonstrate independent thinking tempered by respect for others and the environment;
5. work individually and collaboratively to promote social justice through an appreciation of diversity and a commitment to democratic values.

Career Opportunities

- Administrator
- Business Executive
- Civil Servant

- Customer Service Representative
- Foreign Service Officer
- Human Resources Administrator
- Journalist
- Lawyer
- Manager
- Personnel Representative
- Salesperson
- Stockbroker
- Teacher (K-6)
- Writer

Features

The primary function of the Liberal Studies Office is to provide proper advising for completing the major. Friendly, experienced office staff, including two full-time academic advisors, are available to help at every step. Advising is available through individual appointments and on a "drop-in" basis.

Although the Liberal Studies Teacher Preparation Degree Pathway is a multiple subject matter preparation program, there is no longer an exemption from the multiple subject test, which is now the CSET or "California Subject Exam for Teachers" (no longer the MSAT). The Liberal Studies Teacher Preparation Degree Pathway is aligned with Content Standards for K-6 curriculum and the CSET, and is, therefore, the best preparation for future K-6 teachers.

The Liberal Studies major is offered both day and evening, and on both the Hayward and Concord Campuses. However, Concord Campus and evening-only students may not find a full range of courses and options available to them.

Liberal Studies is also one of the majors available through the Cal State East Bay Program for Accelerated College Education (PACE). For information on PACE, see the PACE section of the College and Department Information chapter of this catalog or call the PACE office at (510) 885-PACE (7223).

Major Requirements (B.A.)

The major with the Liberal Arts pathway consists of 92 units. The major with the Teacher Preparation pathway consists of a minimum of 144 units. The B.A. degree requires a minimum of 180 units. The Core Curriculum includes upper-division GE requirements in Areas C4 and D4. Students must be certain to meet with a GE advisor to select courses satisfying all other GE breadth requirements.

I. Core Curriculum (20 units)

All Liberal Studies students must complete the following courses. The Liberal Studies Core Curriculum satisfies Upper Division GE requirements in Humanities, Area C4 and Social Sciences, Area D4.

- ANTH 3000 - Anthropology in the Modern World *Units: 4* (Area D4)
- ENGL 3020 - Advanced Expository Writing *Units: 4*
- HDEV 4110 - Child Cognitive Development *Units: 4*
or
- HDEV 4130 - The Social Development of Children *Units: 4*
- HIST 3400 - America to 1900 *Units: 4*
or
- HIST 3017 - The Twentieth Century *Units: 4* (Area C4)
- MUS 3002 - What to Listen for in Music *Units: 4* (Area C4)
or
- THEA 3225 - Theatre Today *Units: 4* (Area C1 or C4)

II. Degree Pathway Requirements

The Liberal Studies Major offers two different pathways to degree completion. Majors must choose either the Teacher Preparation pathway or the Liberal Arts pathway.

A. Teacher Preparation Degree Pathway (120 units minimum)

Students selecting the Teacher Preparation Degree Pathway must complete the following two components:

1. Required Courses (102-103 units)

Note: As some of these courses may also be used to satisfy GE requirements, please consult with a Liberal Studies Advisor when selecting courses to ensure the most efficient progress toward degree completion.

- ART 1020 - The Creative Process *Units: 4*
- BIOL 1000 - Basic Concepts in Biology *Units: 5*
- CHEM 1100 - Introduction to College Chemistry *Units: 5*

- DANC 3021 Cultural Dance Forms *Units: 3*
or
- DANC 3235 - Dance for Children *Units: 4*

- ENGL 3010 - Modern English Grammar *Units: 4*
or
- ENGL 2005 - Grammar for Writers *Units: 4*

- Any Upper Division English Literature *Units: 4*

- GEOG 2300 - Cultural Geography *Units: 4*
or
- GEOG 3505 - Geography of California *Units: 4* (Area D4)

- GEOL 1000 - Earth Systems Science *Units: 5*

- HDEV 4120 - Child Language Development *Units: 4*
or
- ANTH 3800 - Language and Culture *Units: 4* (Area D4)

- HDEV 4150 - Children in Families and Communities *Units: 4*
or
- HDEV 3301 - Child Development *Units: 4*

- HIST 1014 - World Civilizations I *Units: 4*
- HIST 1015 - World Civilizations II *Units: 4*
- HIST 3500 - History of California *Units: 4*
- HSC 1100 - Health: Maintenance of Wellness *Units: 4*
- KIN 3251 - Physical Education for the Classroom Teacher: Physical Considerations *Units: 4*
- KIN 3252 - Physical Education for the Classroom Teacher: Psycho-Social Considerations *Units: 4*
- MATH 2011 - Number Systems *Units: 4*
- MATH 4012 - Geometry and Measurement *Units: 4*
- MATH 4013 - Statistics, Data Analysis, and Probability *Units: 4*
- MATH 4014 - Algebra and Functions *Units: 4*
- PHYS 1700 - Elementary Physics *Units: 4*
- PHYS 1780 - Elementary Physics Laboratory *Units: 1*

- SOC 1000 - Introduction to Sociology *Units: 4*
or
- any SOC course not used in minor *Units: 4*
- TED 3001 - Exploring Education *Units: 3*
- THEA 3650 - Dramatic Activities for Children *Units: 4*
or
- MUS 3002 - What to Listen for in Music *Units: 4*

One of the following:

- ENGL 2030 - Introduction to Critical Writing on Prose Fiction *Units: 4*
- ENGL 2040 - Introduction to Critical Writing on Poetry *Units: 4*
- ENGL 2050 - Introduction to Critical Writing on Drama *Units: 4*

2. Depth of Study (18 units minimum)

This requirement may be satisfied by completing one of the methods listed below. In each of the following options, at least 18 units must be unique to the Depth of Study and may not be counted in any other areas of the Liberal Studies Major:

- Complete any Minor offered by the university
- Complete one of the following approved options:
 - Childhood Studies (18-20 units, see below)
 - Special Education (22-25 units, see below)
 - Studies in Education (For BPEP students only) (20 units, see below)
- With the approval of the Liberal Studies Director, students may create a special option (18 unit minimum)

B. Liberal Arts Degree Pathway (72 unit minimum)

Students selecting the Liberal Arts Degree Pathway must complete the following two components:

1. Liberal Studies Area Electives (48 units)

Through consultation with Liberal Studies advisors, select 12 units of electives from each of the four areas listed below. At least 32 of the 48 Area Elective units must be from upper division courses numbered 3000 or higher. Courses used to satisfy Liberal Studies Area Electives **MUST** be approved by a Liberal Studies Advisor. No more than two courses from a single discipline may be taken within a single area:

Area 1:

Social Sciences (Anthropology, Communications, Criminal Justice Administration, Geography, History, Political Science, Psychology, Sociology)

Area 2:

Natural Sciences/Mathematics (Biology, Chemistry, Geology, Math, Physics, Statistics)

Area 3:

Humanities (Art, English, Modern Languages, Music, Philosophy, Theater/Dance)

Area 4:

Interdisciplinary Studies (Ethnic Studies, Health Sciences, Human Development, International Studies, Kinesiology/PE, Latin American Studies, Recreation, Teacher Education, Women's Studies)

2. Depth of Study (24 units)

This requirement may be satisfied by completing one of the methods listed below. In each of the following options, at least 24 units must be unique to the Depth of Study and may not be counted in any other areas of the Liberal Studies Major:

- a. Students may complete any Minor program offered by the university;
- b. Students may complete one of the following options:
 - i. Organizational Leadership (28 units, see below)
 - ii. Special Education (22-25 units, see below)
- c. With the approval of the Liberal Studies Director, students may create a Special Option of at least 24 units.

III. Approved Options for the Liberal Studies Major

Studies in Education Option (20 units) BPEP Only

For Bachelors Plus: Early Pathway Students only.

- TED 3005 - Intermediate Field Experience in the Elementary School A *Units: 1*
- TED 3006 - Intermediate Field Experience in the Elementary School B *Units: 1*
- TED 5110 - Computer-Based Technology in the Classroom I *Units: 3*
- TED 5351 - Psychological Foundations of Education and Planning for Instruction *Units: 4*
- TED 5355 - Equity and Diversity/Teaching English Learners A *Units: 4*
- TED 5366 - Equity and Diversity/Teaching English Learners B *Units: 3*
- TED 5378 - Teaching Special Populations in General Education Settings *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Mathematics, Applied Mathematics Option, B.S.

Program Description

Modern technological society has many fields that need specialists in mathematics. The Department of Mathematics and Computer Science offers a variety of courses intended for those who want to pursue a career in mathematics as well as those who wish to develop quantitative and problem-solving skills for use in other fields.

Students choose to major in mathematics for a number of reasons. Some intend to become high school, community college, or university teachers. Others seek careers in business, industry, or government, where mathematically trained people are in demand. An undergraduate major in mathematics is one of the best preparations not only for studying advanced Mathematics, but also for graduate work in Computer Science, Statistics,

Operations Research, Actuarial Science, and the Natural Sciences. Most law schools are pleased to accept students with rigorous and logical training in Mathematics.

Many students combine their study of mathematics with the study of computer science. A popular option is to obtain a double major in Mathematics and Computer Science. Or students may earn a major in one of these fields and minor in the other.

The major requires seven lower division courses and eleven upper division mathematics courses. The requirements are flexible enough that a student can choose one of several options according to his/her interest.

Each student is assigned a faculty advisor when (s)he declares a major and should consult this advisor regularly. A booklet containing a number of sample schedules, as well as further information about the mathematics major, is available in the Mathematics/Computer Science Student Service Center (North Science 337) or see the departmental website.

Although it is not a requirement, mathematics majors are urged to take as many courses as possible in an area such as Biology, Chemistry, Economics, Management Sciences, Physics, or Statistics. These are all fields where Mathematics plays a significant role, and it is important for a mathematics major to appreciate the relevance of the subject in applications. Study of one or more foreign languages is also recommended, especially for those students anticipating graduate study.

Student Learning Outcomes

Students graduating with a B.S. in Mathematics from Cal State East Bay will be able to:

1. Apply the definitions, techniques and theorems of undergraduate abstract mathematics.
2. Apply the definitions, techniques and theorems of undergraduate applied mathematics.
3. Apply mathematical algorithms to solve problems, both individually and in teams.
4. Creatively conjecture and rigorously write, analyze and critique proofs.
5. Communicate mathematics to others in written and/or oral form with precision, clarity and organization.
6. Apply techniques of at least one area of mathematics in depth.

Career Opportunities

- Actuary
- Computer Analyst
- Cryptologist
- Economist
- Engineer
- Engineering Analyst
- Financial Analyst
- Market Researcher
- Mathematician
- Numerical Analyst
- Operations Research Analyst
- Personnel Representative
- Programmer
- Professor/Teacher
- Publisher Representative
- Statistician
- Stockbroker
- Technical Writer

Features

Cal State East Bay students can participate in the Mathematics Club, which features lectures by students and faculty and offers a variety of social activities.

Each year the department awards a number of scholarships covering a portion of fees for the subsequent year. Scholarship applications may be obtained from the department student service center office during the Winter quarter.

Qualified upper division and graduate students may be employed as graders for classes.

Students who intend to earn a high school teaching credential after graduation may apply most of their mathematics major courses to meet the standards of California's Single Subject Matter Preparation Program for a Single Subject Credential in Mathematics.

Math majors who continue on to earn a master's degree in mathematics may pursue a career as a community college mathematics teacher.

Preparation

For Advanced Placement course equivalencies, see Registration.

Major Requirements (B.S.)

Because requirements are subject to change, consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 72 units; the BS degree requires a total of 180 units.

I. Lower Division Requirements (28 units)

This requirement consists of the following seven courses:

- MATH 1304 - Calculus I *Units: 4*
- MATH 1305 - Calculus II *Units: 4*
- MATH 2304 - Calculus III *Units: 4*
- MATH 2305 - Calculus IV *Units: 4*
- CS 1160 - Introduction to Computer Science I *Units: 4*
- MATH 2101 - Elements of Linear Algebra *Units: 4*
- MATH 2150 - Discrete Structures *Units: 4*
(Mathematics majors may substitute MATH 3151 or MATH 4151 for MATH 2150.)

Note:

A student who has recently taken a pre-calculus course in high school should be prepared to begin the calculus sequence. A student with three years of high school mathematics, including two years of algebra and one year of geometry, should be prepared to take MATH 1130, or possibly MATH 1300. Students who are unsure about what mathematics course to begin with should call the department office. Students may not enroll in any baccalaureate level mathematics or computer science courses unless they have met the Entry Level Mathematics (ELM) requirement, or are exempt from it. Contact the Testing Office 885-3661 for more information.

II. Upper Division Requirements (44 units)

Every Mathematics major is required to complete one of the following options:

Applied Mathematics Option (44 units)

Required courses:

- MATH 3000 - Introduction to Abstract Mathematics and Proofs *Units: 4* (Mathematics majors are encouraged to take MATH 3000 as early as possible.)
- MATH 3100 - Linear Algebra *Units: 4*
- MATH 3331 - Differential Equations *Units: 4*

Three out of the four courses from the following two sequences:

- MATH 3121 - Abstract Algebra I *Units: 4* - MATH 3122 - Abstract Algebra II *Units: 4*
- MATH 3300 - Analysis I *Units: 4* - MATH 3301 - Analysis II *Units: 4*

Two sequences from the following four:

- MATH 3151 - Combinatorics *Units: 4* - MATH 4151 - Graph Theory *Units: 4*
- MATH 3361 - Ordinary Differential Equations *Units: 4* - MATH 4361 - Partial Differential Equations *Units: 4*
- MATH 3750 - Numerical Analysis I *Units: 4* - MATH 4750 - Numerical Analysis II *Units: 4*
- MATH 3841 - Linear Programming *Units: 4* - MATH 4841 - Topics in Optimization *Units: 4*

Electives:

One upper division course (4 units), which may include any upper division mathematics course not already taken for the major or

- STAT 3401 - Introduction to Probability Theory I *Units: 4*
 - STAT 3402 - Introduction to Probability Theory II *Units: 4*
 - STAT 3502 - Statistical Inference I *Units: 4*
 - STAT 3503 - Statistical Inference II *Units: 4*
 - STAT 3601 - Statistics and Probability for Science and Engineering I *Units: 4*
 - STAT 4401 - Introduction to Stochastic Processes *Units: 4*
 - STAT 4515 - Applied Multivariate Analysis *Units: 4*
 - STAT 4601 - Regression *Units: 4*
- or*
- CS 4170 - Theory of Automata *Units: 4*
 - CS 4245 - Analysis of Algorithms *Units: 4*

but not:

- MATH 4012 - Geometry and Measurement *Units: 4*
- MATH 4013 - Statistics, Data Analysis, and Probability *Units: 4*
- MATH 4014 - Algebra and Functions *Units: 4*
- MATH 4030 - Advanced Study of School Mathematics *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Mathematics, Mathematics Teaching Option, B.S.

Program Description

Modern technological society has many fields that need specialists in mathematics. The Department of Mathematics and Computer Science offers a variety of courses intended for those who want to pursue a career in mathematics as well as those who wish to develop quantitative and problem-solving skills for use in other fields.

Students choose to major in mathematics for a number of reasons. Some intend to become high school, community college, or university teachers. Others seek careers in business, industry, or government, where mathematically trained people are in demand. An undergraduate major in mathematics is one of the best preparations not only for studying advanced Mathematics, but also for graduate work in Computer Science, Statistics, Operations Research, Actuarial Science, and the Natural Sciences. Most law schools are pleased to accept students with rigorous and logical training in Mathematics.

Many students combine their study of mathematics with the study of computer science. A popular option is to obtain a double major in Mathematics and Computer Science. Or students may earn a major in one of these fields and minor in the other.

The major requires seven lower division courses and eleven upper division mathematics courses. The requirements are flexible enough that a student can choose one of several options according to his/her interest.

Each student is assigned a faculty advisor when (s)he declares a major and should consult this advisor regularly. A booklet containing a number of sample schedules, as well as further information about the mathematics major, is available in the Mathematics/Computer Science Student Service Center (North Science 337) or see the departmental website.

Although it is not a requirement, mathematics majors are urged to take as many courses as possible in an area such as Biology, Chemistry, Economics, Management Sciences, Physics, or Statistics. These are all fields where Mathematics plays a significant role, and it is important for a mathematics major to appreciate the relevance of the subject in applications. Study of one or more foreign languages is also recommended, especially for those students anticipating graduate study.

Student Learning Outcomes

Students graduating with a B.S. in Mathematics from Cal State East Bay will be able to:

1. Apply the definitions, techniques and theorems of undergraduate abstract mathematics.
2. Apply the definitions, techniques and theorems of undergraduate applied mathematics.
3. Apply mathematical algorithms to solve problems, both individually and in teams.
4. Creatively conjecture and rigorously write, analyze and critique proofs.
5. Communicate mathematics to others in written and/or oral form with precision, clarity and organization.
6. Apply techniques of at least one area of mathematics in depth.

Career Opportunities

- Actuary
- Computer Analyst
- Cryptologist
- Economist
- Engineer
- Engineering Analyst
- Financial Analyst
- Market Researcher
- Mathematician
- Numerical Analyst
- Operations Research Analyst
- Personnel Representative
- Programmer
- Professor/Teacher
- Publisher Representative
- Statistician
- Stockbroker
- Technical Writer

Features

Cal State East Bay students can participate in the Mathematics Club, which features lectures by students and faculty and offers a variety of social activities.

Each year the department awards a number of scholarships covering a portion of fees for the subsequent year. Scholarship applications may be obtained from the department student service center office during the Winter quarter.

Qualified upper division and graduate students may be employed as graders for classes.

Students who intend to earn a high school teaching credential after graduation may apply most of their mathematics major courses to meet the standards of California's Single Subject Matter Preparation Program for a Single Subject Credential in Mathematics.

Math majors who continue on to earn a master's degree in mathematics may pursue a career as a community college mathematics teacher.

Preparation

For Advanced Placement course equivalencies, see Registration.

Major Requirements (B.S.)

Because requirements are subject to change, consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 72 units; the BS degree requires a total of 180 units.

I. Lower Division Requirements (28 units)

This requirement consists of the following seven courses:

- MATH 1304 - Calculus I *Units: 4*
 - MATH 1305 - Calculus II *Units: 4*
 - MATH 2304 - Calculus III *Units: 4*
 - MATH 2305 - Calculus IV *Units: 4*
 - CS 1160 - Introduction to Computer Science I *Units: 4*
 - MATH 2101 - Elements of Linear Algebra *Units: 4*
 - MATH 2150 - Discrete Structures *Units: 4*
- (Mathematics majors may substitute MATH 3151 or MATH 4151 for MATH 2150.)

Note:

A student who has recently taken a pre-calculus course in high school should be prepared to begin the calculus sequence. A student with three years of high school mathematics, including two years of algebra and one year of geometry, should be prepared to take MATH 1130, or possibly MATH 1300. Students who are unsure about what mathematics course to begin with should call the department office. Students may not enroll in any baccalaureate level mathematics or computer science courses unless they have met the Entry Level Mathematics (ELM) requirement, or are exempt from it. Contact the Testing Office 885-3661 for more information.

II. Upper Division Requirements (44 units)

Every Mathematics major is required to complete one of the following options:

Option C - Mathematics Teaching (44 units)

Required courses:

- MATH 3000 - Introduction to Abstract Mathematics and Proofs *Units: 4* (Mathematics majors are encouraged to take MATH 3000 as early as possible.)
- MATH 3121 - Abstract Algebra I *Units: 4*

- MATH 3100 - Linear Algebra *Units: 4*
- MATH 3215 - Geometry I *Units: 4*
- MATH 3300 - Analysis I *Units: 4*
- MATH 3331 - Differential Equations *Units: 4*
- MATH 3600 - Number Theory *Units: 4*
- MATH 4040 - History of Mathematics *Units: 4*
- STAT 3401 - Introduction to Probability Theory I *Units: 4*

One from the following three courses:

- MATH 3122 - Abstract Algebra II *Units: 4*
- MATH 3301 - Analysis II *Units: 4*
- MATH 4215 - Topics in Geometry *Units: 4*

Electives:

One upper division course (4 units), which may include any upper division mathematics course not already taken for the major or

- STAT 3401 - Introduction to Probability Theory I *Units: 4*
- STAT 3402 - Introduction to Probability Theory II *Units: 4*
- STAT 3502 - Statistical Inference I *Units: 4*
- STAT 3503 - Statistical Inference II *Units: 4*
- STAT 3601 - Statistics and Probability for Science and Engineering I *Units: 4*
- STAT 4401 - Introduction to Stochastic Processes *Units: 4*
- STAT 4515 - Applied Multivariate Analysis *Units: 4*

- STAT 4601 - Regression *Units: 4*
or
- CS 4170 - Theory of Automata *Units: 4*

- CS 4245 - Analysis of Algorithms *Units: 4*

but not:

- MATH 4012 - Geometry and Measurement *Units: 4*
- MATH 4013 - Statistics, Data Analysis, and Probability *Units: 4*
- MATH 4014 - Algebra and Functions *Units: 4*
- MATH 4030 - Advanced Study of School Mathematics *Units: 4*

Note:

A student who completes Option C can satisfy rather easily the requirements for the State-approved Single Subject Matter Preparation Program in Mathematics, a program of courses designed to prepare the student for entry into the Credential Program in Mathematics, provided that judicious choices of mathematics elective courses and general education courses are made. To accomplish this, the student who completes Option C must:

1. Choose MATH 4901 - Senior Seminar 4 in the mathematics elective category;
2. Complete STAT 3502 - Statistical Inference I 4; and
3. Complete TED 3001 - Exploring Education 3 and/or other field experience approved by the Mathematics Subject Matter Preparation Adviser: At least 45 hours of classroom experience in an instructional capacity is required.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Mathematics, Pure Mathematics Option, B.S.

Program Description

Modern technological society has many fields that need specialists in mathematics. The Department of Mathematics and Computer Science offers a variety of courses intended for those who want to pursue a career in mathematics as well as those who wish to develop quantitative and problem-solving skills for use in other fields.

Students choose to major in mathematics for a number of reasons. Some intend to become high school, community college, or university teachers. Others seek careers in business, industry, or government, where mathematically trained people are in demand. An undergraduate major in mathematics is one of the best preparations not only for studying advanced Mathematics, but also for graduate work in Computer Science, Statistics, Operations Research, Actuarial Science, and the Natural Sciences. Most law schools are pleased to accept students with rigorous and logical training in Mathematics.

Many students combine their study of mathematics with the study of computer science. A popular option is to obtain a double major in Mathematics and Computer Science. Or students may earn a major in one of these fields and minor in the other.

The major requires seven lower division courses and eleven upper division mathematics courses. The requirements are flexible enough that a student can choose one of several options according to his/her interest.

Each student is assigned a faculty advisor when (s)he declares a major and should consult this advisor regularly. A booklet containing a number of sample schedules, as well as further information about the mathematics major, is available in the Mathematics/Computer Science Student Service Center (North Science 337) or see the departmental website.

Although it is not a requirement, mathematics majors are urged to take as many courses as possible in an area such as Biology, Chemistry, Economics, Management Sciences, Physics, or Statistics. These are all fields where Mathematics plays a significant role, and it is important for a mathematics major to appreciate the relevance of the subject in applications. Study of one or more foreign languages is also recommended, especially for those students anticipating graduate study.

Student Learning Outcomes

Students graduating with a B.S. in Mathematics from Cal State East Bay will be able to:

1. Apply the definitions, techniques and theorems of undergraduate abstract mathematics.
2. Apply the definitions, techniques and theorems of undergraduate applied mathematics.
3. Apply mathematical algorithms to solve problems, both individually and in teams.
4. Creatively conjecture and rigorously write, analyze and critique proofs.
5. Communicate mathematics to others in written and/or oral form with precision, clarity and organization.
6. Apply techniques of at least one area of mathematics in depth.

Career Opportunities

- Actuary
- Computer Analyst
- Cryptologist
- Economist
- Engineer
- Engineering Analyst
- Financial Analyst
- Market Researcher

- Mathematician
- Numerical Analyst
- Operations Research Analyst
- Personnel Representative
- Programmer
- Professor/Teacher
- Publisher Representative
- Statistician
- Stockbroker
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Features

Cal State East Bay students can participate in the Mathematics Club, which features lectures by students and faculty and offers a variety of social activities.

Each year the department awards a number of scholarships covering a portion of fees for the subsequent year. Scholarship applications may be obtained from the department student service center office during the Winter quarter.

Qualified upper division and graduate students may be employed as graders for classes.

Students who intend to earn a high school teaching credential after graduation may apply most of their mathematics major courses to meet the standards of California's Single Subject Matter Preparation Program for a Single Subject Credential in Mathematics.

Math majors who continue on to earn a master's degree in mathematics may pursue a career as a community college mathematics teacher.

Preparation

For Advanced Placement course equivalencies, see Registration.

Major Requirements (B.S.)

Because requirements are subject to change, consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 72 units; the BS degree requires a total of 180 units.

I. Lower Division Requirements (28 units)

This requirement consists of the following seven courses:

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- MATH 2304 - Calculus III *Units: 4*
- MATH 2305 - Calculus IV *Units: 4*
- CS 1160 - Introduction to Computer Science I *Units: 4*
- MATH 2101 - Elements of Linear Algebra *Units: 4*
- MATH 2150 - Discrete Structures *Units: 4*
(Mathematics majors may substitute MATH 3151 or MATH 4151 for MATH 2150.)

Note:

A student who has recently taken a pre-calculus course in high school should be prepared to begin the calculus sequence. A student with three years of high school mathematics, including two years of algebra and one year of geometry, should be prepared to take MATH 1130, or possibly MATH 1300. Students who are unsure about what mathematics course to begin with should call the department office. Students may not enroll in any

baccalaureate level mathematics or computer science courses unless they have met the Entry Level Mathematics (ELM) requirement, or are exempt from it. Contact the Testing Office 885-3661 for more information.

II. Upper Division Requirements (44 units)

Every Mathematics major is required to complete one of the following options:

Pure Mathematics Option (44 units)

Required courses:

- MATH 3000 - Introduction to Abstract Mathematics and Proofs *Units: 4* (Mathematics majors are encouraged to take MATH 3000 as early as possible.)
- MATH 3100 - Linear Algebra *Units: 4*
- MATH 3331 - Differential Equations *Units: 4*

The following two sequences:

- MATH 3121 - Abstract Algebra I *Units: 4* - MATH 3122 - Abstract Algebra II *Units: 4*
- MATH 3300 - Analysis I *Units: 4* - MATH 3301 - Analysis II *Units: 4*

One sequence from the following five:

- MATH 3151 - Combinatorics *Units: 4* - MATH 4151 - Graph Theory *Units: 4*
- MATH 3215 - Geometry I *Units: 4* - MATH 4215 - Topics in Geometry *Units: 4*
- MATH 3361 - Ordinary Differential Equations *Units: 4* - MATH 4361 - Partial Differential Equations *Units: 4*
- MATH 3750 - Numerical Analysis I *Units: 4* - MATH 4750 - Numerical Analysis II *Units: 4*
- MATH 3841 - Linear Programming *Units: 4* - MATH 4841 - Topics in Optimization *Units: 4*

Electives:

Two upper division courses (8 units), which may include any upper division mathematics courses not already taken for the major or

- STAT 3401 - Introduction to Probability Theory I *Units: 4*
- STAT 3402 - Introduction to Probability Theory II *Units: 4*
- STAT 3502 - Statistical Inference I *Units: 4*
- STAT 3503 - Statistical Inference II *Units: 4*
- STAT 3601 - Statistics and Probability for Science and Engineering I *Units: 4*
- STAT 4401 - Introduction to Stochastic Processes *Units: 4*
- STAT 4515 - Applied Multivariate Analysis *Units: 4*
- STAT 4601 - Regression *Units: 4*
- *or*
- CS 4170 - Theory of Automata *Units: 4*
- CS 4245 - Analysis of Algorithms *Units: 4*

but not:

- MATH 4012 - Geometry and Measurement *Units: 4*
- MATH 4013 - Statistics, Data Analysis, and Probability *Units: 4*
- MATH 4014 - Algebra and Functions *Units: 4*
- MATH 4030 - Advanced Study of School Mathematics *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Music, B.A.

Program Description

The Music Department at CSUEB integrates rigorous academic training with a driving passion for the making of great music: the classics from the European-American tradition, great jazz, the new 'classics' of our own time, world music, experimental music and more. With a rich variety of opportunities for performing and composing and a deep commitment to teacher education, the Music Department offers something for all students seriously committed to pursuing a life in music.

Student performance groups are open to all qualified students and one need not be a music major to participate. There are more than twenty active ensembles including Symphonic Band, Jazz Workshop, University Singers, Orchestra, Opera Workshop, New Music Ensemble, Chorus, Oratorio Society, Percussion Ensemble, Chamber Singers, and many small vocal and instrumental ensembles.

The Department of Music offers Music, B.A. and Music, M.A. majors which are fully accredited by the National Association of Schools of Music. All music majors have the advantage of continuous applied lessons with instrumental, vocal, or composition teachers on the faculty. A Music Minor is also offered.

The Music Department occupies a large, fully-equipped, modern facility with a number of special resources: a Media Center for Music Technology; Music Resource Center, with thousands of scores and recordings; Choral Music Education Student Resource Center, with thousands of choral octavos and conducting resources; large musical equipment collection for student use; Recital Hall with custom acoustical design; and professional recording facilities.

The Music curriculum is designed to serve the needs of students who have career goals in performance, composition, music technology, jazz, public school or private teaching, or graduate study, as well as those who are pursuing other fields of study and choose music as an elective.

Student Learning Outcomes

Students graduating with a Music, B.A. from Cal State East Bay will be able to:

1. Quickly identify rhythms and pitches and maintain pitch accuracy for application in performance or composition;
2. Bring an enriched tone production with improved technical skills to the performance of their primary instrument;
3. Apply critical and creative thinking and analytical reasoning to address complex challenges in music theory and history;
4. Demonstrate the ability to work collaboratively and respectfully with other musicians in a performance context; and
5. Integrate musical ideas, methods, theory, and practice, and communicate them to others clearly and persuasively, in classroom and performance settings.

Career Opportunities

- Choral Director
- Composer
- Arranger
- Music Professor/Teacher
- Concert Artist
- Symphony Member
- Jazz Musician
- Conductor
- Film/Video Composer

- Musical Theater Director
- DJ
- Freelance Performer

Scholarships

The Music Department annually awards a number of scholarships to entering and returning music majors. For more information, contact the Music Department office at (510) 885-3135.

Preparation

For Advanced Placement course equivalencies, see Registration.

Admission

Students wanting to select music as a major are expected to have had a variety of pre-college cognitive and affective experiences, such as high school performance, high school theory programs, individual private instruction with music professionals, or music professional experiences. Admission to the major in music is determined by audition. Students must complete this audition and be accepted to the department prior to being accepted in the major.

Transfer students will be placed at the appropriate applied lesson level determined by their successful audition. Transfer students will also be subject to a proficiency examination as described under "Special Requirements of the Department of Music, Section IV. Proficiency Examinations."

Standards and guidelines for auditions may be found on the Department of Music website.

Major Requirements (B.A.)

The major consists of 82 units; the B.A. requires a total of 180 units.

Sample Program

A Sample Program for this degree can be found at the department website: <http://music.csueastbay.edu>.

I. Lower Division (49 units)

- MUS 1027 - Sightsinging I *Units: 1 1*
- MUS 1028 - Sightsinging II *Units: 1 1*
- MUS 1029 - Sightsinging III *Units: 1 1*
- MUS 1031 - Music Theory I *Units: 4 1*
- MUS 1032 - Music Theory II *Units: 4 1*
- MUS 1033 - Music Theory III *Units: 4 1*
- MUS 1155 - Music Through the Ages *Units: 4*
- MUS 1610 - Level 10 Applied Study: Piano *Units: 1* - MUS 1699 Level 10 Applied Music *Units: 4*
- MUS 1314 - Basic Piano Class I *Units: 1 1*
- MUS 1315 - Basic Piano Class II *Units: 1 1*
- MUS 1316 - Basic Piano Class III *Units: 1 1*
- MUS 2027 - Sightsinging IV *Units: 1*
- MUS 2028 - Sightsinging V *Units: 1*
- MUS 2029 - Sightsinging VI *Units: 1*
- MUS 2031 - Music Theory IV *Units: 4*
- MUS 2032 - Music Theory V *Units: 4*
- MUS 2033 - Music Theory VI *Units: 4*

- MUS 2610 - Level 20 Applied Study: Piano *Units: 1* - MUS 2699 Level 20 Applied Music *Units: 3*

Select six units:

- MUS 3501 - Large Ensembles: University Chorus *Units: 1* - MUS 3505 Music Performance Activities *Units: 6*
- MUS 3510 - Large Ensembles: East Bay Jazz Workshop *Units: 1* - MUS 3515 Music Performance Activities *Units: 6*

Footnote

1. MUS 1027-MUS 1029 and MUS 1031-MUS 1033 and MUS 1314-MUS 1316 to be taken concurrently.

II. Upper Division (33 units)

- MUS 3051 - Form and Analysis *Units: 4*
- MUS 3155 - Music Literature and Analysis I *Units: 4*
- MUS 3156 - Music Literature and Analysis II *Units: 4*
- MUS 3157 - Music Literature and Analysis III *Units: 4*
- MUS 3531 - Chamber Ensembles: -Chamber Winds *Units: 1* - MUS 3590 Chamber Ensembles. Three units to be taken in three different quarters *Units: 3*
- MUS 3609 - Recital *Units: 1*
- MUS 3610 - Level 30 Applied Study: Piano *Units: 1* - MUS 3699 Level 30 Applied Music *Units: 3*
- MUS 4609 - Level 40 Recital *Units: 1*
- MUS 4610 - Level 40 Applied Study: Piano *Units: 1* - MUS 4699 - Level 40 Applied Music *Units: 3*

Select six units:

- MUS 3501 - Large Ensembles: University Chorus *Units: 1* - MUS 3505 Music Performance Activities *Units: 6*
- MUS 3510 - Large Ensembles: East Bay Jazz Workshop *Units: 1* - MUS 3515 Music Performance Activities *Units: 6*

Special Requirements of the Department of Music

I. Applied Lessons

- Each Music major will declare an applied music discipline (keyboard, voice, wind, brass, percussion, strings, jazz, guitar, harp, composition) with the department
Majors wishing to choose composition as their applied music discipline are required to complete first year study in an instrumental or vocal discipline or demonstrate equivalent experience and submit a portfolio of written works for review. Students whose portfolios are accepted, will begin applied lessons in composition.
- To receive applied lessons, an undergraduate student must be enrolled for a minimum of six units, two of which must be in any music course other than major performance activities and applied music.
Registration for applied lessons requires concurrent enrollment in a major performance activity (MUS 3501-MUS 3505, MUS 3510-MUS 3515). Students who do not meet this requirement by the end of the add/drop period will not be eligible for applied lessons that quarter. Ensembles that may be used to meet this requirement are listed in the Handbook for Music Majors.
All students enrolled in applied lessons must demonstrate their progress through periodic performances before a faculty jury as outlined in the Handbook for Undergraduate Music Majors.
Students are limited to a total of twelve quarters of study in applied instruction (assuming a passing grade for each quarter of instruction was given).

II. Recitals

- Music majors are to appear each year in regularly scheduled student recitals as determined by the department.
- Specific recital performance requirements are outlined in the Handbook for Music Majors.
- Music majors are required to attend four DEPARTMENTAL recitals or concerts each quarter on which they are not a performer or participant. Recital attendance is recorded on a recital attendance card that may be obtained from the Music Department office.

III. Major Performance Activities and Chamber Ensembles

- A. Each music major is required to play his or her principal instrument (as determined by applied lesson enrollment) in one major music performance activity (MUS 3531-MUS 3590) each quarter in which he or she is registered for applied lessons. Students may choose to perform on a secondary instrument or voice to fulfill the requirement if performance opportunities on the principal instrument do not exist.
- B. The 3 units of chamber ensemble required for the Music major must be taken in 3 different quarters.

IV. Proficiency Examinations

- A. Proficiency examinations may be required in any or all aspects of music performance skills, theory, and history and literature as a basis for determining placement in sequence courses.
- B. An upper division transfer student who has completed most of his or her music major may be required to take remediation in certain courses in theory, history and literature, and performance based on the results of the proficiency examinations.
- C. All new music majors (except keyboard majors) are required to take a piano proficiency exam. If the exam is not passed, the student must enroll in the appropriate level of class piano instruction until the proficiency exam or MUS 2313 is passed. (Freshmen music majors, including keyboard majors, are required to take for credit a minimum of MUS 1314, MUS 1315, MUS 1316. They may challenge the course for credit if they believe their keyboard skills meet the demands of MUS 1314, MUS 1315, MUS 1316.)

Major Advising

Since requirements are subject to change, consult an advisor in your major department for clarification and interpretation of your major requirements.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Nursing, Pre-Licensure Option, B.S.

Major Requirements (B.S.)

Pre-Licensure Option

The Pre-Licensure option consists of two years of pre-nursing requirements and eight quarters of nursing courses. Nine quarters, however, are frequently needed to complete all nursing courses because of general education requirements and clinical space limitations. The prerequisite courses may be completed at Cal State East Bay or by taking equivalent courses at another college or university. Nursing courses have concurrent laboratories on campus and in local hospitals and community settings. Expenses for clinical courses include the purchase of uniforms, stethoscopes, malpractice insurance, personal health insurance, laboratory equipment, course syllabi, and so forth.

The Pre-Licensure option program is accredited by the State of California Board of Registered Nursing (Tel: 916-322-3350) and by the Commission on Collegiate Nursing Education (Tel: 202-887-6791). Upon completion of the Nursing major, the student is qualified to take the National Council Licensure Examination (NCLEX-RN) and apply for the California Public Health Nursing Certificate.

Preparation

Students must take eight specific prerequisite courses to be eligible for admission to the Pre-Licensure option. Courses must be completed by the end of fall quarter of the preceding year for the student to be eligible for admission to the nursing program in the following fall quarter.

Students who plan to use transfer courses to satisfy prerequisite requirements must have equivalencies determined by the Cal State East Bay Department of Nursing and Health Sciences.

Admission

Because Nursing has been designated as an impacted program by the Board of Trustees, a special admission procedure has been instituted to assure that all students have an opportunity to be considered for admission to the Nursing major for fall quarter. General information on the program, admission criteria and application procedures may be obtained from the Department of Nursing and Health Sciences. To be considered for admission to the Clinical Nursing courses, students must complete two application forms:

1. The "CSU Application for Admission" and
2. The "Nursing Supplemental Application."

Both applications must be filed in November for admission in the fall quarter of the following academic year. Students must also take the "Test of Essential Academic Skills." To be eligible for admission, the student must have a 3.00 GPA in the following:

1. Eight prerequisite courses, and
2. Four prerequisite science courses

Four prerequisite science courses. "C-" grades are not acceptable in the prerequisites that include:

- BIOL 2010 - Human Physiology and Anatomy I *Units: 5*
or
- BIOL 2011 - Anatomy and Physiology I *Units: 5*

- BIOL 2020 - Human Physiology and Anatomy II *Units: 5*
- BIOL 2025 - Introduction to Microbiology *Units: 5*

- COMM 1000 - Public Speaking *Units: 4*
or
- COMM 1004 - Interpersonal Communication *Units: 4*

- ENGL 1001 - College Writing I *Units: 4*
- STAT 1000 - Elements of Probability and Statistics *Units: 5*

One of the following:

- CHEM 1610 - Survey of Basic Chemistry for Health Sciences *Units: 6*
- CHEM 1615 - Survey of Basic Chemistry for Healthier Living *Units: 6*
- CHEM 1601 - Basic Chemistry for the Health Sciences *Units: 4*
- CHEM 1602 - Basic Chemistry for the Health Sciences *Units: 4*

One course in Critical Thinking such as:

- PHIL 1000 - Workshop in Clear Thinking *Units: 4*
- PHIL 1001 - Introduction to Logic *Units: 4*

Note:

Licensed Vocational Nurses, Medical Corps members, and other health-care personnel wishing to gain admission to more advanced clinical nursing courses must seek advisement from the Department of Nursing and Health Sciences prior to applying to the program.

Curricular Requirements

The Pre-Licensure option consists of 141 units; the B.S. degree requires a total of 180 units.

I. Pre-Nursing Courses (38 units)

- BIOL 2010 - Human Physiology and Anatomy I *Units: 5*
or
- BIOL 2011 - Anatomy and Physiology I *Units: 5*
- BIOL 2020 - Human Physiology and Anatomy II *Units: 5*
- BIOL 2025 - Introduction to Microbiology *Units: 5*
- CHEM 1610 Survey of Basic Chemistry for Health Sciences
or
- CHEM 1615 Survey of Basic Chemistry for Healthier Living
- COMM 1000 - Public Speaking *Units: 4*
or
- COMM 1004 - Interpersonal Communication *Units: 4*
- ENGL 1001 - College Writing I *Units: 4*
- STAT 1000 - Elements of Probability and Statistics *Units: 5*

One course in Critical Thinking such as:

- PHIL 1000 - Workshop in Clear Thinking *Units: 4*
- PHIL 1001 - Introduction to Logic *Units: 4*

II. Non-Nursing Courses (17 units)

- HDEV 3800 - Human Development and Interaction *Units: 4*
- HIST 4710 - History and Trends in Nursing *Units: 4*

One of the following:

- ANTH 1000 - Introduction to Anthropology *Units: 4*
- ANTH 1300 - Introduction to Cultural Anthropology *Units: 4*
- SOC 1000 - Introduction to Sociology *Units: 4*
- SOC 1002 - Introduction to Sociology of Individual and Society *Units: 4*

One of the following:

- PSYC 1000 - General Psychology *Units: 5*
- PSYC 1001 - General Psychology and Society *Units: 5*
- PSYC 1005 - General Psychology for Healthier Living *Units: 5*

III. Nursing Courses (86 units)

Level I:

- NURS 2005 - Clinical Pathophysiology *Units: 4*
- NURS 2010 - Principles of Nutrition and Medical Nutrition Therapy *Units: 4*
- NURS 2015 - Pharmacology *Units: 3*
- NURS 2020 - Introduction to Contemporary Nursing *Units: 4*
- NURS 2021 - Nursing Support of Community-Based Clients *Units: 2*
- NURS 2022 - Level I Nursing Skills I *Units: 2*
- NURS 2030 - Nursing Care of Adults I *Units: 4*
- NURS 2031 - Care of Adults I Practicum *Units: 2*

- NURS 2032 - Basic Physical Assessment *Units: 2*
- NURS 2040 - Nursing Care of Adults II *Units: 4*
- NURS 2041 - Care of Adults II Practicum *Units: 3*
- NURS 2042 - Level I Nursing Skills II *Units: 1*

Level II:

- NURS 3001 - Level II Nursing Skills I *Units: 1*
- NURS 3002 - Level II Nursing Skills II *Units: 1*
- NURS 3003 - Level II Nursing Skills III *Units: 1*
- NURS 3201 - Patients and Families with Complex Needs *Units: 4*
- NURS 3202 - Nursing Leadership *Units: 4*
- NURS 3401 - Legal Responsibilities of Health Care Providers *Units: 2*
- NURS 3402 - Nursing Care of Adults III *Units: 1*
- NURS 3403 - Nursing Care of Adults III Practice *Units: 2*
- NURS 3404 - Care of Childbearing Families *Units: 1*
- NURS 3405 - Childbearing Family Practice *Units: 2*
- NURS 3406 - Care of Clients with Psychiatric/Mental Health Needs *Units: 1*
- NURS 3407 - Psychiatric/Mental Health Nursing Practicum *Units: 2*
- NURS 3408 - Nursing Care of Childrearing Families *Units: 1*
- NURS 3409 - Childrearing Family Practice *Units: 2*
- NURS 3410 - Nursing Care of Adults IV *Units: 1*
- NURS 3411 - Nursing Care of Adults IV Practice *Units: 2*
- NURS 3412 - Nursing Care of Elder Adults *Units: 1*
- NURS 3413 - Care of Elder Adults Practice *Units: 2*
- NURS 3502 - Continuum of Care *Units: 2*

Level III:

- NURS 4203 - Research Utilization *Units: 2*
- NURS 4207 - Principles of Community Health Nursing *Units: 2*
- NURS 4208 - Practicum of Community Health Nursing *Units: 4*
- NURS 4301 - Preceptorship Seminar *Units: 2*
- NURS 4302 - Preceptorship Practicum *Units: 8*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Nursing, RN Advanced Placement Option, B.S.

Major Requirements (B.S.)

RN Advanced Placement Option

The Registered Nurse Advanced Placement option is a 4-6 quarter program. The first quarter focuses on selected theories and concepts taught in Levels I and II of the basic nursing program. Students join the basic program for Research Utilization, Nursing Leadership, Community Health, and Preceptorship.

Note: The RN Advanced Placement program is open only to students who hold a California Registered Nurse licensure.

Eligibility

To be eligible for the RN Advanced Placement option, a student must:

1. Have an unencumbered, unrestricted California RN License by time of entry into the program.
2. Be a graduate of an ADN program or Diploma Nursing program (within the last twelve months); or have six months or equivalent full-time nursing practice within the United States in the past two years.
3. Meet all university admission requirements and nursing program deadlines.
4. Meet minimum prerequisite GPA requirements. See website for details.

Curricular Requirements

The RN Advanced Placement option consists of 107-109 units many of which will have been completed in the student's basic nursing program. Units may be earned through credit by examination. The B.S. degree requires a total of 180 units.

Program

A Program pathway for this degree can be found at the department website: <http://www20.csueastbay.edu/csci/departments/nursing>.

I. Pre-Nursing Courses (38 units)

- BIOL 2010 - Human Physiology and Anatomy I *Units: 5*
or BIOL 2010 Human Physiology and Anatomy I
- BIOL 2020 - Human Physiology and Anatomy II *Units: 5*
or BIOL 2021 Anatomy and Physiology II
- BIOL 2025 - Introduction to Microbiology *Units: 5*
- CHEM 1610 - Survey of Basic Chemistry for Health Sciences *Units: 6*
or CHEM 1615 Survey of Basic Chemistry for Healthier Living
- COMM 1000 - Public Speaking *Units: 4*
or COMM 1004 Interpersonal Communication
- ENGL 1001 - College Writing I *Units: 4*
- STAT 1000 - Elements of Probability and Statistics *Units: 5*

And a course in Critical Thinking such as:

- PHIL 1000 - Workshop in Clear Thinking *Units: 4*
or
- PHIL 1001 - Introduction to Logic *Units: 4*

II. Non-Nursing Courses (17 units)

- ANTH 1000 - Introduction to Anthropology *Units: 4*
or ANTH 1300 Introduction to Cultural Anthropology Units: 4
or SOC 1000 Introduction to Sociology Units: 4
or SOC 1002 Introduction to Sociology of Individual and Society Units: 4
- HDEV 3800 - Human Development and Interaction *Units: 4*
- HIST 4710 - History and Trends in Nursing *Units: 4*

- PSYC 1000 - General Psychology *Units: 5*
or PSYC 1001 General Psychology and Society *Units: 5*
or PSYC 1005 General Psychology for Healthier Living *Units: 5*

III. Nursing Courses (44 units)

Bridge Year:

- NURS 2005 - Clinical Pathophysiology *Units: 4*
- NURS 2010 - Principles of Nutrition and Medical Nutrition Therapy *Units: 4*
- NURS 2015 - Pharmacology *Units: 3*
- NURS 3202 - Nursing Leadership *Units: 4*
- NURS 3502 - Continuum of Care *Units: 2*
- NURS 3503 - Advanced Physical Assessment *Units: 3*
- NURS 3505 - Advanced Principles I *Units: 4*
- NURS 3507 - Advanced Principles II *Units: 4*
- NURS 3509 - Advanced Principles III *Units: 4*

Level III:

- NURS 4203 - Research Utilization *Units: 2*
- NURS 4207 - Principles of Community Health Nursing *Units: 2*
- NURS 4208 - Practicum of Community Health Nursing *Units: 4*
- NURS 4301 - Preceptorship Seminar *Units: 2*
- NURS 4305 - Preceptorship Practicum for the RN-BSN Student *Units: 4*

Nursing Course Progression Policy

I. Nursing Course Progression

- A. Courses with the NURS prefix must be successfully completed or challenged in the proper sequence.
- B. In order to progress within the nursing major the Pre-Licensure student must:
 1. earn a grade of "C" or better or "CR" in courses with a NURS prefix.
 2. earn a grade of "C-" or better in NURS 2005 and NURS 2015, before beginning Level II clinical courses.
 3. theory and clinical courses must be taken concurrently as listed below:
 - Level 1: N2020/2021, N2030/2031, N2040/2041.
 - Level 2: N3402/3402, N3404/3405, N3406/3407, N3408/3409, N3410/3411, N3412/3413.
 - Level 3: N4207/4208, N4301/4302.
 4. be enrolled concurrently or have earned a grade of "C" or better in NURS 3201 for all subsequent Level II courses.
 5. earn a grade of "C" or better in NURS 3202 before beginning any subsequent Level III nursing courses.
 6. in order to progress within the nursing major, RN-BSN students must earn a grade of "C" or better or "CR" in NURS prefix courses.
- C. A student loses eligibility for preferential admission to subsequent nursing courses if a grade of "D", "F", "NC" or "W" is received in any NURS prefix course. This policy also holds true for students who receive a Departmental Warning in a clinical course.
- D. A student may not continue in the current clinical practice course after notification of unsafe clinical behavior(s) and will receive a "NC" grade in said course. Unsafe clinical behavior may result in either a clinical failure or expulsion from the program depending on the gravity of the "unsafe" behavior(s). The individual instructor will consult with the Level Team members and Level Coordinator. Should the "unsafe" behavior(s) be deemed serious enough for possible expulsion from the program, the matter will be forwarded to the "Executive Committee" for consideration.
- E. After the add/drop date, all withdrawals from a course must have instructor approval.
- F. An incomplete may be assigned for a clinical course by the clinical instructor IF a student is in good standing. The criteria of good standing in a clinical course include satisfactory completion of at least 80% of the total clinical hours (Note: the total of hours will vary dependent on the specific clinical course) and demonstration towards the successful completion of the clinical objectives. (See University Catalog Grading and Academic Standards: Incomplete)
- G. If completion of a concurrent theory and clinical course results in a failure of one of the courses the student must repeat the failed course. If the failure occurs in the theory course the student will be required to repeat only the theory course. If the failure occurs in the clinical course the student

must repeat the clinical course and audit the co-requisite theory course. (This is consistent with the BRN regulatory body policy regarding concurrency of theory and clinical courses.)

- H. Consistent with CSUEB policy, "an "I" must normally be made up within one calendar year immediately following the end of the term during which it was assigned. This limitation prevails whether or not you maintain continuous enrollment. You may not repeat a course in which you currently have an incomplete grade." However, if the course is required for progression in the Nursing program, the earlier completion of the required work may be mandatory. Your instructor will specify the work needed for completion and will communicate the requirements to you in writing with a copy to the department or program chair. When you complete the required work and it has been evaluated, your instructor will submit a change of grade form and a final academic grade will be recorded. If you do not complete your work within the allowed time limit, the grade will be recorded as an "IC" (See University Catalog Grading and Academic Standards: Incomplete).
- I. A student who has two failures ("D", "F", "IC" or "NC") in any nursing prefix courses will be dropped from the nursing major. Calculation of failures includes any nursing prefix course which was passed by academic renewal.

II. Reentering Clinical Nursing Sequence

- A. A written request for readmission to the clinical nursing sequence must be submitted to the Chair of the Department of Nursing and Health Science. Written requests are to be dated and signed if submitted via hardcopy, and include current contact information. In order to facilitate a decision based on sufficient background, a brief history including dates and reason for leaving the program should be included. This must be done by the end of add/drop of the quarter prior to the quarter of intended return.
- B. A student who withdraws or interrupts the clinical nursing sequence for physical and/or emotional reasons must present evidence (e.g., doctor's letter) that his/her current health status is satisfactory to physically and/or emotionally care for patients in any clinical setting. The final decision for reentry into the nursing sequence will rest with the Executive Committee of the Nursing Program.
- C. A student who has been failed in a clinical course as the result of unsafe behavior might not be permitted re-entry to the nursing program. Unsafe behaviors may include though not limited to the following: 1) purposeful falsification of a client record, 2) blatant disregard of client confidentiality, 3) denying responsibility for one's own deviation from standard practice, 4) act or threat of intimidation, harassment, or physical aggression, 5) actions, which places the client or others in physical or emotional jeopardy, 6) abusive behavior toward clients, faculty, staff, or colleagues, 7) failure to disclose actions, which places the client or others in physical or emotional jeopardy, 8) ignoring the need for essential information before intervening, or 9) other behaviors deemed unsafe by the clinical instructor.
- D. A student is not guaranteed that a request to repeat a clinical nursing course will be granted. This will depend on availability of clinical nursing practice space. First priority for repeating will be given to students who withdrew or dropped the course. Second priority will be given to those students who failed the course. The student must meet all new requirements in effect upon return to clinical nursing courses.
- E. Students who allow two years to elapse between enrollments in clinical nursing courses will be subject to currency considerations. If a student is allowed to re-enter the nursing program, he or she may be required to repeat or audit selected nursing courses at the discretion of the Nursing Executive Committee. The student must meet all new requirements in effect upon return to clinical nursing courses.

III. Major Advising

Because requirements are subject to change, consult an advisor in your major department for clarification and interpretation of your major requirements.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Philosophy, B.A.

Program Description

The Department of Philosophy at Cal State East Bay seeks to promote the exploration of enduring human concerns--concerns, for example, about the nature of knowledge, ethics, truth, and God. In addition to emphasizing classical philosophy, the department encourages students to think critically about contemporary debates, particularly in the areas of law, human rights, and social justice; science, technology, and values; and religion. The department's faculty strive to instill in students lifelong habits of questioning, of exploring views contrary to their own, and of

engaging in reasoned and honest dialogue. By their focus on analysis, comprehension and communication, they aim to develop qualities that are essential to personal fulfillment, civic responsibility, and career success.

Many different kinds of students choose the major in philosophy. Some intend to do graduate work in philosophy, often with the intention of becoming philosophy professors who research and teach in philosophy. Others take philosophy as a preparation for another professional area. Traditionally, for example, philosophy has been one of the chief roads to professional law schools. Philosophy also serves as a good general liberal arts education, since many of the long-established university disciplines are founded on philosophical principles: political science, sociology, education, aesthetics, physics, and other subjects. Finally, many students major in philosophy in order to prepare for careers that require clarity of thought, analytical ability, good writing skills, and the ability to present a reasoned argument.

Student Learning Outcomes

Students graduating with a Philosophy, B.A. from Cal State East Bay will be able to:

1. write clear, academically rigorous, argumentative essays.
2. read complex texts, create original arguments, analyze the arguments of others, and express these criticisms orally and in writing.
3. demonstrate knowledge of philosophical and/or religious traditions, their relevant concepts, theories, methods, and historical contexts.
4. develop their capacities for ethical decision making, Socratic humility, openness to the ideas of others, reflective self-awareness, and a life-long curiosity about big questions.
5. cultivate an appreciation for a diversity of ideas and values across time and for human difference in areas such as: religion, culture, ethnicity, race, class, sexuality, and gender.

Career Opportunities

- Analyst
- Business Executive
- Clergy
- Consultant
- Critic
- Editor
- Foreign Service Officer
- Journalist
- Lawyer
- Philosopher
- Policy Analyst
- Primary/Secondary School Teacher
- Professor
- Public Administrator
- Theologian
- Writer

Major Requirements (B.A.)

The Philosophy major consists of 60 units of Philosophy courses of which at least 56 units MUST be upper division; the B.A. degree requires a total of 180 units. Philosophy majors should consult with a Philosophy department advisor or the chairperson for advice in selecting Philosophy courses that suit their individual educational and career goals.

I. Core Curriculum (28 units)

a. One Ethics course:

- PHIL 3100 - Ethics *Units: 4*

b. Two History of Philosophy courses (8 units) selected from:

- PHIL 3601 - Ancient and Medieval Philosophy *Units: 4*
- PHIL 3602 - Modern Philosophy *Units: 4*
- PHIL 3603 - Thinkers of the Enlightenment *Units: 4*
- PHIL 3605 - Studies in Contemporary Philosophy *Units: 4*

c. One Metaphysics / Epistemology course (4 units) selected from:

- PHIL 3301 - Theory of Knowledge *Units: 4*
- PHIL 3311 - Metaphysics *Units: 4*
- PHIL 3322 - Philosophy of Language *Units: 4*
- PHIL 3332 - Philosophy of Science *Units: 4*

d. One Religion course (4 units) selected from:

- PHIL 3400 - Philosophy of Religion *Units: 4*
- PHIL 3403 - Religions of the East *Units: 4*
- PHIL 3431 - Cults, New Religious Movements *Units: 4*

e. One Diversity course (4 units) selected from:

- PHIL 3510 - Human Rights and Social Justice: Cultural Groups and Women in the U.S. *Units: 4*
- PHIL 3511 - Philosophy of Human Rights and Global Justice *Units: 4*
- PHIL 3515 - Race and Social Justice *Units: 4*
- PHIL 3720 - Feminist Philosophy *Units: 4*
- PHIL 3721 - African-American Philosophical Perspectives *Units: 4*

f. Capstone Course (4 units)

- PHIL 3305 - Fundamental Questions: Self, Nature, and God *Units: 4*

II. Electives (32 units)

Students can choose Electives from any other course in Philosophy not already taken in fulfillment of one the requirements above. Students may count no more than one lower-division course (4 units) towards the major. Students are free to build their own elective path through philosophy according to their interests. Students wishing to focus their studies in a particular direction should choose electives from courses listed in one of the suggested areas below. Note: Some of the courses below might be taken either as electives OR to fulfill requirements listed above):

Philosophy Graduate School Preparation

- PHIL 3002 - Modern Logic *Units: 4*
- PHIL 3301 - Theory of Knowledge *Units: 4*
- PHIL 3311 - Metaphysics *Units: 4*
- PHIL 3332 - Philosophy of Science *Units: 4*
- PHIL 3400 - Philosophy of Religion *Units: 4*
- PHIL 3502 - Social and Political Philosophy *Units: 4*
- PHIL 3601 - Ancient and Medieval Philosophy *Units: 4*
- PHIL 3602 - Modern Philosophy *Units: 4*
- PHIL 3603 - Thinkers of the Enlightenment *Units: 4*
- PHIL 3605 - Studies in Contemporary Philosophy *Units: 4*
- PHIL 4606 - Seminar in Philosophy *Units: 4*

Religious Studies

- PHIL 3400 - Philosophy of Religion *Units: 4*
- PHIL 3401 - Contemporary Religious Thinkers *Units: 4*
- PHIL 3403 - Religions of the East *Units: 4*
- PHIL 3404 - Mysticism *Units: 4*
- PHIL 3410 - Comparative Themes in Eastern and Western Philosophy *Units: 4*
- PHIL 3411 - Judaism *Units: 4*
- PHIL 3417 - Islam *Units: 4*
- PHIL 3421 - Atheism, Agnosticism, and Theism *Units: 4*
- PHIL 3430 - The Bible in Film *Units: 4*
- PHIL 3431 - Cults, New Religious Movements *Units: 4*
- PHIL 3432 - Religion, Monsters, and Horror *Units: 4*
- PHIL 3433 - Views of the Afterlife *Units: 4*

Pre-Law

- PHIL 3010 - Critical Legal Reasoning *Units: 4*
- PHIL 3502 - Social and Political Philosophy *Units: 4*
- PHIL 3503 - Philosophy of Law *Units: 4*
- PHIL 3510 - Human Rights and Social Justice: Cultural Groups and Women in the U.S. *Units: 4*
- PHIL 3511 - Philosophy of Human Rights and Global Justice *Units: 4*
- PHIL 3515 - Race and Social Justice *Units: 4*

Applied Ethics

- PHIL 3151 - Environmental Ethics *Units: 4*
- PHIL 3152 - Biomedical Ethics *Units: 4*
- PHIL 3510 - Human Rights and Social Justice: Cultural Groups and Women in the U.S. *Units: 4*
- PHIL 3560 - Business and Professional Ethics *Units: 4*
- PHIL 3925 - Contemporary Ethical Issues *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Physics, B.A.

Program Description

In physics, one attempts to discover, formulate, explain, and apply the basic laws of nature. You could be a physicist and work in areas as diverse as astrophysics, relativity, properties of materials, or the standard model of fundamental particles and interactions. Principles of physics provide the foundation for other sciences as well as engineering. Some of the examples of modern technological development from the application of physical principles include radio and television, computers, laser scanners, and communication by fiber optics. In addition, physicists explore problems in astronomy and theories for the origin and evolution of the universe.

At Cal State East Bay students can choose between a Physics, B.S. degree and a Physics, B.A. degree. The Physics, B.S. degree major program is designed to give students an understanding of the fundamentals of physics including concepts of atomic and nuclear physics, classical mechanics, wave motion and sound, electromagnetism and optics, heat and thermodynamics, relativity, quantum mechanics, and elementary particles and their interactions.

Whereas the Physics, B.S. degree provides more focus, the Physics, B.A. degree major program is designed to satisfy the needs of students who require greater breadth of study across the sciences than the Physics, B.S. program can provide. Students who might be more interested in the Physics, B.A. degree, for example, would be prospective secondary-school teachers, or students who wish to pursue interdisciplinary study (e.g., in biophysics), or graduate study in professional programs (e.g., in the health sciences), business, or law in technical fields. For those students interested in becoming secondary-school teachers, an option in Physics Education is available which has a larger breadth of science courses required for teaching in California.

Student Learning Outcomes

Students graduating with a Physics, B.S. or Physics, B.A. degree will be able to:

1. Understand the fundamental principles of physics and be able to apply these core ideas to analyze physical processes;
2. Apply quantitative reasoning and critical thinking to solve complex problems, both theoretical and experimental in nature;
3. Independently learn new technical subjects and skills;
4. Design and assemble experiments, quantitatively analyze the results using appropriate statistical procedures and tests of systematic errors, and draw meaningful conclusions;
5. Effectively communicate scientific ideas, both theoretical and experimental, to a variety of audiences through written and oral presentations, both formal and informal;
6. Work effectively as a member of a collaboration to solve problems.

Career Opportunities

- Astronomer
- Biochemical Engineer
- Device Engineer
- Electrical Engineer
- Electric Power Administrator
- Geophysicists
- Laboratory Assistant
- Laser Technician
- Mechanical Engineer
- Pharmacologist
- Physics Teacher
- Pollution Control Technician
- Professor
- Renewable Energy Manager
- Research Scientist
- Satellite Engineer
- Security Researcher
- Software Engineer
- Technical Writer

Features

With relatively small classes and teaching as a major emphasis of faculty members, the physics major involves a considerable amount of individualized instruction. In addition, research done by faculty members often includes student participation.

Hands-on experience is a central theme of the programs. Upper division students use modern equipment to conduct experiments in such areas as fiber optics, atomic and molecular spectroscopy, nuclear magnetic resonance, and solar cell construction and characterization.

Physics majors have an opportunity to be inducted into the national physics honors society, Sigma Pi Sigma. Additionally, students may join the Society of Physics Students (SPS).

Preparation

For Advanced Placement course equivalencies, see Registration.

Major Requirements (B.A.)

The B.A. degree major consists of 67-70 units; the B.A. degree requires a total of 180 units.

I. Lower Division (37-40 units)

- MATH 1304 - Calculus I *Units: 4*
- MATH 1305 - Calculus II *Units: 4*
- MATH 2101 - Elements of Linear Algebra *Units: 4*
- MATH 2304 - Calculus III *Units: 4*
- MATH 2305 - Calculus IV *Units: 4*
- PHYS 2004 - General Physics *Units: 5*
and as grouped, either:
- PHYS 1001 - General Physics: Newtonian Mechanics and Oscillations *Units: 5*
- PHYS 1002 - General Physics: Thermodynamics and Optics *Units: 5*
- PHYS 1003 - General Physics: Electromagnetism *Units: 5*
or
- PHYS 2701 - Introductory Physics: Force, Mass and Motion *Units: 4*
- PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*
- PHYS 2703 - Introductory Physics: Light and Modern Physics *Units: 4*

II. Upper Division (27 units)

- PHYS 3101 - Analytic Mechanics I *Units: 3*
- PHYS 3151 - Thermal and Statistical Physics I *Units: 3*
- PHYS 3180 - Computational Physics *Units: 4*
- PHYS 3280 - Electronics *Units: 4*
- PHYS 3281 - Experimental Physics *Units: 4*
- PHYS 3301 - Quantum Mechanics I *Units: 3*
- PHYS 4001 - Electromagnetism I *Units: 3*
Two units selected from:
- PHYS 4250 - Selected Topics *Units: 1-3*
and/or
- PHYS 4850 - Undergraduate Research *Units: 1-3*
- PHYS 4950 - Physics Capstone *Units: 1*

III. Electives (3 units)

Select three (3) units of electives from the following:

- PHYS 3102 - Analytic Mechanics II *Units: 3*
- PHYS 3152 - Thermal and Statistical Physics II *Units: 3*
- PHYS 3283 - Advanced Laboratory *Units: 4*
- PHYS 3302 - Quantum Mechanics II *Units: 3*
- PHYS 4002 - Electromagnetism II *Units: 3*
- PHYS 4600 - Solid State *Units: 3*
- PHYS 4700 - Modern Optics *Units: 3*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Physics, B.S.

Program Description

In physics, one attempts to discover, formulate, explain, and apply the basic laws of nature. You could be a physicist and work in areas as diverse as astrophysics, relativity, properties of materials, or the standard model of fundamental particles and interactions. Principles of physics provide the foundation for other sciences as well as engineering. Some of the examples of modern technological development from the application of physical principles include radio and television, computers, laser scanners, and communication by fiber optics. In addition, physicists explore problems in astronomy and theories for the origin and evolution of the universe.

At Cal State East Bay students can choose between a Physics, B.S. degree and a Physics, B.A. degree. The Physics, B.S. degree major program is designed to give students an understanding of the fundamentals of physics including concepts of atomic and nuclear physics, classical mechanics, wave motion and sound, electromagnetism and optics, heat and thermodynamics, relativity, quantum mechanics, and elementary particles and their interactions.

Whereas the Physics, B.S. degree provides more focus, the Physics, B.A. degree major program is designed to satisfy the needs of students who require greater breadth of study across the sciences than the Physics, B.S. program can provide. Students who might be more interested in the Physics, B.A. degree, for example, would be prospective secondary-school teachers, or students who wish to pursue interdisciplinary study (e.g., in biophysics), or graduate study in professional programs (e.g., in the health sciences), business, or law in technical fields. For those students interested in becoming secondary-school teachers, an option in Physics Education is available which has a larger breadth of science courses required for teaching in California.

Student Learning Outcomes

Students graduating with a Physics, B.S. or Physics, B.A. degree will be able to:

1. Understand the fundamental principles of physics and be able to apply these core ideas to analyze physical processes;
2. Apply quantitative reasoning and critical thinking to solve complex problems, both theoretical and experimental in nature;
3. Independently learn new technical subjects and skills;
4. Design and assemble experiments, quantitatively analyze the results using appropriate statistical procedures and tests of systematic errors, and draw meaningful conclusions;
5. Effectively communicate scientific ideas, both theoretical and experimental, to a variety of audiences through written and oral presentations, both formal and informal;
6. Work effectively as a member of a collaboration to solve problems.

Career Opportunities

- Astronomer
- Biochemical Engineer
- Device Engineer
- Electrical Engineer
- Electric Power Administrator
- Geophysicists
- Laboratory Assistant
- Laser Technician
- Mechanical Engineer
- Pharmacologist
- Physics Teacher
- Pollution Control Technician

- Professor
- Renewable Energy Manager
- Research Scientist
- Satellite Engineer
- Security Researcher
- Software Engineer
- Technical Writer

Features

With relatively small classes and teaching as a major emphasis of faculty members, the physics major involves a considerable amount of individualized instruction. In addition, research done by faculty members often includes student participation.

Hands-on experience is a central theme of the programs. Upper division students use modern equipment to conduct experiments in such areas as fiber optics, atomic and molecular spectroscopy, nuclear magnetic resonance, and solar cell construction and characterization.

Physics majors have an opportunity to be inducted into the national physics honors society, Sigma Pi Sigma. Additionally, students may join the Society of Physics Students (SPS).

Preparation

For Advanced Placement course equivalencies, see Registration.

Sample Program

A *Sample Program* for this degree can be found at the department website: www20.csueastbay.edu/csci/departments/physics/index.html

Major Requirements (B.S.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The B.S. degree major consists of 108-110 units; the B.S. degree requires a total of 180 units.

I. Lower Division (50 units)

- CHEM 1101 - General Chemistry *Units: 5*
- CHEM 1102 - General Chemistry *Units: 5*
- MATH 1304 - Calculus I *Units: 4*
- MATH 1305 - Calculus II *Units: 4*
- MATH 2304 - Calculus III *Units: 4*
- MATH 2305 - Calculus IV *Units: 4*
- MATH 2101 - Elements of Linear Algebra *Units: 4*
- PHYS 1001 - General Physics: Newtonian Mechanics and Oscillations *Units: 5*
- PHYS 1002 - General Physics: Thermodynamics and Optics *Units: 5*
- PHYS 1003 - General Physics: Electromagnetism *Units: 5*
- PHYS 2004 - General Physics *Units: 5*

II. Upper Division (58-60 units)

- MATH 3331 - Differential Equations *Units: 4*
- PHYS 3101 - Analytic Mechanics I *Units: 3*
- PHYS 3102 - Analytic Mechanics II *Units: 3*
- PHYS 3151 - Thermal and Statistical Physics I *Units: 3*

- PHYS 3152 - Thermal and Statistical Physics II *Units: 3*
- PHYS 3180 - Computational Physics *Units: 4*
- PHYS 3280 - Electronics *Units: 4*
- PHYS 3281 - Experimental Physics *Units: 4*
- PHYS 3283 - Advanced Laboratory *Units: 4*
- PHYS 3301 - Quantum Mechanics I *Units: 3*
- PHYS 3302 - Quantum Mechanics II *Units: 3*
- PHYS 3303 - Quantum Mechanics III *Units: 3*
- PHYS 4001 - Electromagnetism I *Units: 3*
- PHYS 4002 - Electromagnetism II *Units: 3*
- PHYS 4003 - Electromagnetism III *Units: 3*

- PHYS 4250 - Selected Topics *Units: 1-3*
or
- PHYS 4850 - Undergraduate Research *Units: 1-3*

- PHYS 4600 - Solid State *Units: 3*
- PHYS 4700 - Modern Optics *Units: 3*
- PHYS 4950 - Physics Capstone *Units: 1*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Physics, Physics Education Option, B.A.

Program Description

In physics, one attempts to discover, formulate, explain, and apply the basic laws of nature. You could be a physicist and work in areas as diverse as astrophysics, relativity, properties of materials, or the standard model of fundamental particles and interactions. Principles of physics provide the foundation for other sciences as well as engineering. Some of the examples of modern technological development from the application of physical principles include radio and television, computers, laser scanners, and communication by fiber optics. In addition, physicists explore problems in astronomy and theories for the origin and evolution of the universe.

At Cal State East Bay students can choose between a Physics, B.S. degree and a Physics, B.A. degree. The Physics, B.S. degree major program is designed to give students an understanding of the fundamentals of physics including concepts of atomic and nuclear physics, classical mechanics, wave motion and sound, electromagnetism and optics, heat and thermodynamics, relativity, quantum mechanics, and elementary particles and their interactions.

Whereas the Physics, B.S. degree provides more focus, the Physics, B.A. degree major program is designed to satisfy the needs of students who require greater breadth of study across the sciences than the Physics, B.S. program can provide. Students who might be more interested in the Physics, B.A. degree, for example, would be prospective secondary-school teachers, or students who wish to pursue interdisciplinary study (e.g., in biophysics), or graduate study in professional programs (e.g., in the health sciences), business, or law in technical fields. For those students interested in becoming secondary-school teachers, an option in Physics Education is available which has a larger breadth of science courses required for teaching in California.

Student Learning Outcomes

Students graduating with a Physics, B.S. or Physics, B.A. degree will be able to:

1. Understand the fundamental principles of physics and be able to apply these core ideas to analyze physical processes;

2. Apply quantitative reasoning and critical thinking to solve complex problems, both theoretical and experimental in nature;
3. Independently learn new technical subjects and skills;
4. Design and assemble experiments, quantitatively analyze the results using appropriate statistical procedures and tests of systematic errors, and draw meaningful conclusions;
5. Effectively communicate scientific ideas, both theoretical and experimental, to a variety of audiences through written and oral presentations, both formal and informal;
6. Work effectively as a member of a collaboration to solve problems.

Career Opportunities

- Astronomer
- Biochemical Engineer
- Device Engineer
- Electrical Engineer
- Electric Power Administrator
- Geophysicists
- Laboratory Assistant
- Laser Technician
- Mechanical Engineer
- Pharmacologist
- Physics Teacher
- Pollution Control Technician
- Professor
- Renewable Energy Manager
- Research Scientist
- Satellite Engineer
- Security Researcher
- Software Engineer
- Technical Writer

Features

With relatively small classes and teaching as a major emphasis of faculty members, the physics major involves a considerable amount of individualized instruction. In addition, research done by faculty members often includes student participation.

Hands-on experience is a central theme of the programs. Upper division students use modern equipment to conduct experiments in such areas as fiber optics, atomic and molecular spectroscopy, nuclear magnetic resonance, and solar cell construction and characterization.

Physics majors have an opportunity to be inducted into the national physics honors society, Sigma Pi Sigma. Additionally, students may join the Society of Physics Students (SPS).

Preparation

For Advanced Placement course equivalencies, see Registration.

Physics Education Option

The Bachelor of Arts degree, major in Physics with an option in Physics Education, is designed for students interested in a career teaching physics at the high school level, but also prepares students to work as an industrial physicist. This program covers all of the content areas necessary for teaching both high school physics and general science courses in middle and high schools, thus preparing graduates to enter a single subject credential program. The B.A. degree major with a Physics Education option consists of 85-87 units; the B.A. degree requires a total of 180 units.

I. Lower Division (50-52 units)

- BIOL 1000 - Basic Concepts in Biology *Units: 5*
 - CHEM 1100 - Introduction to College Chemistry *Units: 5*
 - GEOL 1000 - Earth Systems Science *Units: 5*
 - MATH 1304 - Calculus I *Units: 4*
 - MATH 1305 - Calculus II *Units: 4*
 - MATH 2304 - Calculus III *Units: 4*
 - MATH 2305 - Calculus IV *Units: 4*
 - MATH 2101 - Elements of Linear Algebra *Units: 4*
- And select from the following grouping of courses:*
- PHYS 1001 - General Physics: Newtonian Mechanics and Oscillations *Units: 5*
 - PHYS 1002 - General Physics: Thermodynamics and Optics *Units: 5*
 - PHYS 1003 - General Physics: Electromagnetism *Units: 5*
- or*
- PHYS 2004 - General Physics *Units: 5*
 - PHYS 2701 - Introductory Physics: Force, Mass and Motion *Units: 4*
 - PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*
 - PHYS 2703 - Introductory Physics: Light and Modern Physics *Units: 4*

II. Upper Division (35 units)

- PHIL 3335 - Science, Technology and Values *Units: 4*
 - PHYS 3101 - Analytic Mechanics I *Units: 3*
 - PHYS 3151 - Thermal and Statistical Physics I *Units: 3*
 - PHYS 3180 - Computational Physics *Units: 4*
 - PHYS 3280 - Electronics *Units: 4*
 - PHYS 3281 - Experimental Physics *Units: 4*
 - PHYS 3301 - Quantum Mechanics I *Units: 3*
 - PHYS 4001 - Electromagnetism I *Units: 3*
- Three (3) units selected from either:*
- PHYS 4250 - Selected Topics *Units: 1-3*
- or*
- PHYS 4850 - Undergraduate Research *Units: 1-3*
- PHYS 4950 - Physics Capstone *Units: 1*
 - TED 3001 - Exploring Education *Units: 3*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Political Science, B.A.

Program Description

The political science curriculum helps students to acquire an organized body of knowledge about government and to think analytically about public policy, law, and politics. The political science degree prepares graduates to enter careers in government, public service, public administration, public policy analysis, legislative advocacy, business, international relations, and teaching. Many Cal State East Bay political science graduates continue their academic careers in law school, or in the pursuit of graduate degrees in political science or public policy analysis.

Student Learning Outcomes

Students graduating with a B.A. in Political Science will be able to:

1. develop and articulate an understanding of democratic theory and practice and gain practical experience in politics, public policy, and civic engagement.
2. demonstrate through oral and written competency, an understanding of the theories, concepts, empirical content, and research agendas of the fields of political science with advanced understanding in the selected option.
3. demonstrate an understanding of political culture in the U.S. and around the world including the economic, ideological, ethnic and cultural groups and movements that engage the political process.
4. articulate career goals, demonstrate knowledge of how to achieve those goals, and produce evidence of working to achieve the goals.
5. demonstrate the ability to apply knowledge through collaborative learning and teamwork.

Career Opportunities

- Administrative Assistant
- Attorney
- Campaign Aide/Manager
- Diplomat
- FBI/CIA Agent
- Foreign Service Officer
- International Relations Specialist
- Journalist
- Labor Organizer/Union Representative
- Law Clerk
- Legislative Advocate/Lobbyist
- Legislative Aide
- Paralegal
- Legal Assistant
- Police Officer
- Politician
- Polling Specialist
- Private Investigator
- Public Administrator
- Public Information Officer
- Research Specialist
- Secret Service Agent
- Teacher

Features

The political science major offers a Pre-Law option for students planning a career in law. The Public Affairs and Administration option is designed to meet the needs of students contemplating a career in public administration. The Political Science department offers a major and a minor. Special features of the Political Science major include: the Intercollegiate Model United Nations Club; field trips to Sacramento and to State and Federal courts; guest political speakers; pre-law advising; local, Sacramento, Washington, and political campaign internships; and the Political Science Club.

Preparation

For Advanced Placement course equivalencies, see Registration.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The regular major consists of 48-64 units; the Pre-Law option consists of 64 units; the Public Affairs and Administration option consists of 61 units. The B.A. degree requires a total of 180 units.

The Traditional Political Science Major (48-64 units)

I. Lower Division (8-16 units)

- POSC 1201 - American Political Institutions *Units: 4*
- POSC 1202 - Public Policy/California Politics *Units: 4*
- Students may take an additional 0-8 units of lower division political science courses.

II. Upper Division (40-48 units)

- POSC 3030 - The Study of Political Science *Units: 4*
- *One course in each of the following five fields:*
 1. American Government and Public Administration (includes courses listed under Public Policy and Administration)
 2. Public Law
 3. Comparative Government and Politics
 4. International Relations
 5. Political Theory
- POSC 4910 - Political Science Seminar *Units: 4*
- Twelve (12) to twenty (20) additional units from upper division political science courses.

Pre-Law Students

The study of law is a postgraduate professional program, requiring three years of full-time study beyond the completion of the bachelor's degree. No specific pre-law undergraduate program is required for admission to law schools. However, students wishing to focus on legal studies at Cal State East Bay, may complete the Pre-Law option in the Political Science major.

Students intending to enter law school commonly complete undergraduate majors in political science, economics, business, or history. The prelaw student's undergraduate plan of study should include among its objectives a facility in the proper use of written and spoken English, a sampling of undergraduate law courses, one or more critical/logical thinking courses, and a basic understanding of government and economics. Some law schools recommend that students take a basic accounting course, particularly if they are interested in business or tax law.

Students planning to enter law school should consult a pre-law advisor. Dr. David Baggins of the Department of Political Science, who is an attorney, serves as the university pre-law advisor. Several other departments also have pre-law advisors.

Most accredited law schools require that applicants complete the Law School Admission Test. The LSAT is typically given in September, December, February, and June at one or more testing centers in the Bay Area. Pre-law students should obtain LSAT registration materials and law school applications early in their senior year. Students can access information on the LSAT by viewing <http://www.lsac.org>. The Political Science department library has a copy of the Law School Guidebook and many law school catalogs.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Political Science, Pre-Law Option, B.A.

Program Description

The political science curriculum helps students to acquire an organized body of knowledge about government and to think analytically about public policy, law, and politics. The political science degree prepares graduates to enter careers in government, public service, public administration, public policy analysis, legislative advocacy, business, international relations, and teaching. Many Cal State East Bay political science graduates continue their academic careers in law school, or in the pursuit of graduate degrees in political science or public policy analysis.

Student Learning Outcomes

Students graduating with a B.A. in Political Science will be able to:

1. develop and articulate an understanding of democratic theory and practice and gain practical experience in politics, public policy, and civic engagement.
2. demonstrate through oral and written competency, an understanding of the theories, concepts, empirical content, and research agendas of the fields of political science with advanced understanding in the selected option.
3. demonstrate an understanding of political culture in the U.S. and around the world including the economic, ideological, ethnic and cultural groups and movements that engage the political process.
4. articulate career goals, demonstrate knowledge of how to achieve those goals, and produce evidence of working to achieve the goals.
5. demonstrate the ability to apply knowledge through collaborative learning and teamwork.

Career Opportunities

- Administrative Assistant
- Attorney
- Campaign Aide/Manager
- Diplomat
- FBI/CIA Agent
- Foreign Service Officer
- International Relations Specialist
- Journalist
- Labor Organizer/Union Representative
- Law Clerk
- Legislative Advocate/Lobbyist
- Legislative Aide
- Paralegal
- Legal Assistant
- Police Officer
- Politician
- Polling Specialist
- Private Investigator
- Public Administrator
- Public Information Officer
- Research Specialist
- Secret Service Agent
- Teacher

Features

The political science major offers a Pre-Law option for students planning a career in law. The Public Affairs and Administration option is designed to meet the needs of students contemplating a career in public administration. The Political Science department offers a major and a minor. Special features of the Political Science major include: the Intercollegiate Model United Nations Club; field trips to Sacramento and to State and Federal courts; guest political speakers; pre-law advising; local, Sacramento, Washington, and political campaign internships; and the Political Science Club.

Preparation

For Advanced Placement course equivalencies, see Registration.

Pre-Law Option

Also see "Pre-Law Students" later in this chapter.

Students taking this option will focus their coursework in legal studies. Completion of this program will lead to a B.A. degree, major in Political Science with an option in Pre-Law. The total required for the major with Pre-Law option is 64 units. The total required for the B.A. degree is 180 units.

Two quarters before you expect to graduate, complete a major check sheet and inquire about other requirements for graduation. The following is an outline indicating specific courses and options necessary for completing the option in pre-law.

I. Foundation Courses (24 units)

- POSC 1201 - American Political Institutions *Units: 4*
- POSC 1202 - Public Policy/California Politics *Units: 4*
- POSC 3030 - The Study of Political Science *Units: 4*
- One lower or upper division course in International Relations *Units: 4*
- One lower or upper division course in Comparative Government *Units: 4*
- One upper division course in Political Theory *Units: 4*

II. The Political and Policy Context of the Law (16 units)

Choose 16 units from the following:

- HSC 3350 - Health Legislation and Government Programs *Units: 4*
- MGMT 4500 - Business, Government, and Society *Units: 4*
- Or any Political Science course listed under the headings "American Government and Politics" or "Public Policy and Administration."

III. Public Law (20 units)

Any 20 units recognized by the Department as a public law class. These include:

- ACCT 2701 - Legal Environment of Business *Units: 4*
- POSC 3410 - Law and Society *Units: 4*
- POSC 3417 - Survey of American Law *Units: 4*
- POSC 3441 - American Constitutional Law: Government *Units: 4*
- POSC 3442 - American Constitutional Law: Rights *Units: 4*
- POSC 3460 - Environmental Law *Units: 4*
- POSC 3470 - International Law *Units: 4*
- POSC 3503 - Philosophy of Law *Units: 4*
- POSC 4445 - Bureaucratic Politics and Administrative Law *Units: 4*
- Or any business law class.

IV. Capstone (4 units)

- POSC 4910 - Political Science Seminar *Units: 4*

Pre-Law Students

The study of law is a postgraduate professional program, requiring three years of full-time study beyond the completion of the bachelor's degree. No specific pre-law undergraduate program is required for admission to law schools. However, students wishing to focus on legal studies at Cal State East Bay, may complete the Pre-Law option in the Political Science major.

Students intending to enter law school commonly complete undergraduate majors in political science, economics, business, or history. The prelaw student's undergraduate plan of study should include among its objectives a facility in the proper use of written and spoken English, a sampling of undergraduate law courses, one or more critical/logical thinking courses, and a basic understanding of government and economics. Some law schools recommend that students take a basic accounting course, particularly if they are interested in business or tax law.

Students planning to enter law school should consult a pre-law advisor. Dr. David Baggins of the Department of Political Science, who is an attorney, serves as the university pre-law advisor. Several other departments also have pre-law advisors.

Most accredited law schools require that applicants complete the Law School Admission Test. The LSAT is typically given in September, December, February, and June at one or more testing centers in the Bay Area. Pre-law students should obtain LSAT registration materials and law school applications early in their senior year. Students can access information on the LSAT by viewing <http://www.lsac.org>. The Political Science department library has a copy of the Law School Guidebook and many law school catalogs.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Political Science, Public Affairs and Administration Option, B.A.

Program Description

The political science curriculum helps students to acquire an organized body of knowledge about government and to think analytically about public policy, law, and politics. The political science degree prepares graduates to enter careers in government, public service, public administration, public policy analysis, legislative advocacy, business, international relations, and teaching. Many Cal State East Bay political science graduates continue their academic careers in law school, or in the pursuit of graduate degrees in political science or public policy analysis.

Student Learning Outcomes

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1. develop and articulate an understanding of democratic theory and practice and gain practical experience in politics, public policy, and civic engagement.
2. demonstrate through oral and written competency, an understanding of the theories, concepts, empirical content, and research agendas of the fields of political science with advanced understanding in the selected option.
3. demonstrate an understanding of political culture in the U.S. and around the world including the economic, ideological, ethnic and cultural groups and movements that engage the political process.
4. articulate career goals, demonstrate knowledge of how to achieve those goals, and produce evidence of working to achieve the goals.
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Preparation

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Public Affairs and Administration Option

Students taking this option will concentrate their coursework in American political institutions, public policy, and administrative processes. Completion of this program will lead to a B.A. degree major in Political Science, with an option in Public Affairs and Administration.

Since several courses overlap (ECON 2301, ECON 2302, ACCT 2251, MGMT 4500), the department encourages students who pursue this option to consider combining it with the Minor in Business Administration.

The major with this option consists of 61 units; the B.A. requires a total of 180 units. The course requirements for this option are as follows

I. Lower Division (21 units)

- ECON 2301 - Principles of Microeconomics *Units: 4*
- ECON 2302 - Principles of Macroeconomics *Units: 4*
or
- POSC 1202 - Public Policy/California Politics *Units: 4*
- POSC 1201 - American Political Institutions *Units: 4*

One course from each group (9 units)

Group I:

- STAT 1000 - Elements of Probability and Statistics *Units: 5*
or
- STAT 2010 - Elements of Statistics for Business and Economics *Units: 5*

Group II:

- ACCT 2251 - Introduction to Financial Accounting *Units: 4*

II. Upper Division (40 units)

1. Group I: Public Affairs and Administrative Process (at least 12 units)

- ECON 3370 - Public Sector Economics *Units: 4*
- POSC 3800 - Public Policy Analysis *Units: 4*
- POSC 4445 - Bureaucratic Politics and Administrative Law *Units: 4*
- PUAD 4800 - Public Administration and Society *Units: 4*
- PUAD 4830 - Organization Theory and Human Behavior *Units: 4*

2. Group II: Political Institutions and Processes (at least 8 units)

Any Political Science courses listed under the heading "American Government and Politics"

3. Group III: Public Affairs and Public Policy (8 units)

- ECON 3375 - Public Choice: The Economics of Politics *Units: 4*
- HSC 3350 - Health Legislation and Government Programs *Units: 4*
- MGMT 4500 - Business, Government, and Society *Units: 4*
- POSC 3505 - American Foreign Policy *Units: 4*
- and any Political Science course listed under the heading "Public Policy and Administration," if not used under Group I.

4. Service Requirement (4 units)

May be fulfilled by taking POSC 3113, 3898 or another service course approved by the department chair.

5. Foundation Requirement (4 units)

- POSC 3030 - The Study of Political Science *Units: 4*

6. Capstone Course (4 units)

- POSC 4910 - Political Science Seminar *Units: 4*

Pre-Law Students

The study of law is a postgraduate professional program, requiring three years of full-time study beyond the completion of the bachelor's degree. No specific pre-law undergraduate program is required for admission to law schools. However, students wishing to focus on legal studies at Cal State East Bay, may complete the Pre-Law option in the Political Science major.

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Other Degree Requirements

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Psychology, B.A.

Program Description

Psychology is the science of behavior and mental processes. Many psychologists work primarily with people to understand how they think, respond to stress, learn and forget, develop into unique personalities, and interact with one another. Others study the behavior and nervous systems of animals in order to find general principles that apply across species. Psychologists apply their knowledge to do therapy and counseling, to improve practices in schools, prisons, and rehabilitation centers, and to enhance performance in industry, business, and the professions.

The Psychology department offers a major in both the Bachelor of Arts (B.A.) and the Bachelor of Science (B.S.) degrees. These are basic programs; to become a "psychologist" requires graduate training.

The B.A. program is appropriate for most psychology students. It provides a basic understanding of human behavior and motivation that is valuable in many careers in business, government, and education. It also provides the background expected for entry into graduate programs in clinical psychology, counseling psychology, school psychology, health psychology, social psychology, or experimental psychology.

The B.S. programs are designed for more specialized purposes. Students in the B.S. program must select one of the two options in that program: Industrial/Organizational Psychology or Ergonomics and Human Factors. The option in Industrial/Organizational Psychology provides preparation for careers related to business, with an emphasis on personnel management. The option in Ergonomics and Human Factors provides preparation for careers in the design of work environments to take account of human limitations and strengths, for example, the design of equipment (computers, aircraft, automobiles) or the design of industrial procedures.

In Psychology's minor program, students can choose courses to complement training in business, communication, health and medicine, law and criminology, statistics, biology, and many other fields. Of special interest to students in that program might be our courses in developmental psychology, personality, cognitive processes, and learning.

Student Learning Outcomes

Students graduating with a B.A. or B.S. in Psychology will be able to:

1. think scientifically and employ sound scientific methodology;
2. speak and write clearly about the content and theory of the field of psychology;
3. apply psychological principles and prepare for careers.

Career Opportunities

B.A.:

- Clinical/Counseling/Child Psychologist
- Community Mental Health Employee

- Experimental Psychologist
 - Human Service Worker
 - Police/Probation Officer
 - Recreation Worker
 - School Counselor
 - Social Worker
 - Special Education Teacher
 - Substance Abuse Counselor
- B.S.:

- Advertising Account Executive
- Business Executive
- Career Counselor
- Employee Counselor and Trainer
- Human Resource Specialist
- Personnel Representative
- Program Evaluator
- Public Relations Specialist

Features

The Psychology department's facilities include a fully equipped computer lab, an animal lab, and several labs for studying human behavior. These facilities support an unusual and important characteristic of the department - its emphasis on hands-on student involvement in the study of human and animal behavior through participation in laboratory courses and faculty research, in field trips, and in community volunteer placements.

Both the Psychology Club and Psi Chi (national honor society in psychology) provide opportunities for students to get together to hear speakers and to discuss topics such as career and graduate school opportunities.

All courses required for the psychology B.A. major are offered in the evening program over each three-year cycle. However, the range of choices and flexibility of scheduling is more limited in the evening program.

Preparation

For Advanced Placement course equivalencies, see Registration.

Major Requirements

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 72 units; the B.A. degree requires a total of 180 units.

I. Core Requirements (36 units)

- BIOL 1001 - Introduction to Biology *Units: 4* ¹
- BIOL 1002 - Introduction to Biology Lab *Units: 1*
- PSYC 1000 - General Psychology *Units: 5*
or
- PSYC 1001 - General Psychology and Society *Units: 5*
or
- PSYC 1005 - General Psychology for Healthier Living *Units: 5*
- PSYC 2020 - Methods of Investigation in Psychology *Units: 4*
- PSYC 3100 - Experimental Psychology *Units: 5*
- PSYC 4200 - Conditioning and Learning *Units: 4*

- PSYC 4320 - Physiological Psychology *Units: 4*
- STAT 1000 - Elements of Probability and Statistics *Units: 5 2 3*
- STAT 3010 - Statistical Methods in the Social Sciences *Units: 4*

Footnote:

1. May also be used to satisfy the General Education Requirement in Life Science.
2. May also be used toward satisfying the General Education Requirement in Mathematics.
3. May be taken CR/NC.

II. Breadth Requirements (20 units)

One course from each group required:

testing/survey and test construction/individual differences/applied measurement/decision theory

- PSYC 3200 - Psychological Tests *Units: 4*
- PSYC 3210 - Principles of Survey and Test Construction *Units: 4*
- PSYC 3220 - Psychology of Individual Differences *Units: 4*
- PSYC 3230 - Applied Measurement *Units: 4*
- PSYC 3240 - Decision Theory *Units: 4*

social/developmental/personality

- PSYC 3500 - Social Psychology *Units: 4*
- PSYC 4420 - Developmental Psychology *Units: 4*
- PSYC 4610 - Psychology of Personality *Units: 4*

cognitive/sensory/psycholinguistics

- PSYC 4220 - Cognitive Processes *Units: 4*
- PSYC 4345 - Sensation and Perception *Units: 4*
- PSYC 4740 - Psycholinguistics *Units: 4*

comparative/heredity/psychopharmacology/cognitive neuroscience

- PSYC 4310 - Comparative Psychology *Units: 4*
- PSYC 4350 - Heredity and Behavior *Units: 4*
- PSYC 4360 - Psychopharmacology *Units: 4*
- PSYC 4370 - Cognitive Neuroscience *Units: 5*

theories of learning/history and systems/theories of personality

- PSYC 4210 - Theories of Learning *Units: 4*
- PSYC 4390 - History and Systems of Psychology *Units: 4*
- PSYC 4620 - Theories of Personality *Units: 4*

III. Laboratory Requirements (4 units)

Any two required:

Two different courses from those listed below. Although courses in this series may be repeated for unit credit, two different courses are required in the Psychology major.

- PSYC 4800 - Human Learning and Cognition Laboratory *Units: 2*
- PSYC 4801 - Learning and Motivation Laboratory *Units: 2*
- PSYC 4802 - Sensation and Perception Laboratory *Units: 2*
- PSYC 4804 - Social and Personality Laboratory *Units: 2*
- PSYC 4806 - Developmental Psychology Laboratory *Units: 2*
- PSYC 4807 - Clinical Psychology Laboratory *Units: 2*
- PSYC 4808 - Industrial Psychology Laboratory *Units: 2*

IV. Elective Requirements (12 units)

Twelve additional units of permissible upper division (3000 or 4000 level) psychology courses; or STAT 4000 and eight additional units of permissible upper division psychology courses. A maximum of four units from PSYC 4900 or Laboratory Requirement courses may be used toward satisfying this requirement. Course descriptions indicate whether an upper division course is permissible for credit toward the major.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Psychology, Ergonomics and Human Factors Option, B.S.

Program Description

Psychology is the science of behavior and mental processes. Many psychologists work primarily with people to understand how they think, respond to stress, learn and forget, develop into unique personalities, and interact with one another. Others study the behavior and nervous systems of animals in order to find general principles that apply across species. Psychologists apply their knowledge to do therapy and counseling, to improve practices in schools, prisons, and rehabilitation centers, and to enhance performance in industry, business, and the professions.

The Psychology department offers a major in both the Bachelor of Arts (B.A.) and the Bachelor of Science (B.S.) degrees. These are basic programs; to become a "psychologist" requires graduate training.

The B.A. program is appropriate for most psychology students. It provides a basic understanding of human behavior and motivation that is valuable in many careers in business, government, and education. It also provides the background expected for entry into graduate programs in clinical psychology, counseling psychology, school psychology, health psychology, social psychology, or experimental psychology.

The B.S. programs are designed for more specialized purposes. Students in the B.S. program must select one of the two options in that program: Industrial/Organizational Psychology or Ergonomics and Human Factors. The option in Industrial/Organizational Psychology provides preparation for careers related to business, with an emphasis on personnel management. The option in Ergonomics and Human Factors provides preparation for careers in the design of work environments to take account of human limitations and strengths, for example, the design of equipment (computers, aircraft, automobiles) or the design of industrial procedures.

In Psychology's minor program, students can choose courses to complement training in business, communication, health and medicine, law and criminology, statistics, biology, and many other fields. Of special interest to students in that program might be our courses in developmental psychology, personality, cognitive processes, and learning.

Student Learning Outcomes

Students graduating with a B.A. or B.S. in Psychology will be able to:

1. think scientifically and employ sound scientific methodology;

2. speak and write clearly about the content and theory of the field of psychology;
3. apply psychological principles and prepare for careers.

Career Opportunities

B.A.:

- Clinical/Counseling/Child Psychologist
- Community Mental Health Employee
- Experimental Psychologist
- Human Service Worker
- Police/Probation Officer
- Recreation Worker
- School Counselor
- Social Worker
- Special Education Teacher
- Substance Abuse Counselor

B.S.:

- Advertising Account Executive
- Business Executive
- Career Counselor
- Employee Counselor and Trainer
- Human Resource Specialist
- Personnel Representative
- Program Evaluator
- Public Relations Specialist

Features

The Psychology department's facilities include a fully equipped computer lab, an animal lab, and several labs for studying human behavior. These facilities support an unusual and important characteristic of the department - its emphasis on hands-on student involvement in the study of human and animal behavior through participation in laboratory courses and faculty research, in field trips, and in community volunteer placements.

Both the Psychology Club and Psi Chi (national honor society in psychology) provide opportunities for students to get together to hear speakers and to discuss topics such as career and graduate school opportunities.

All courses required for the psychology B.A. major are offered in the evening program over each three-year cycle. However, the range of choices and flexibility of scheduling is more limited in the evening program.

Preparation

For Advanced Placement course equivalencies, see Registration.

Major Requirements (B.S.)

Students in the B.S. degree program must select either the Industrial/Organizational Psychology option or the Ergonomics and Human Factors option. The major with the option in Industrial/Organizational Psychology consists of 75 units; the major with the option in Ergonomics and Human Factors consists of 90-94 units; the B.S. degree requires a total of 180 units.

Ergonomics and Human Factors Option (90-94 units)

A. Psychology Requirements (54 units)

- PSYC 1000 - General Psychology *Units: 5*
or
- PSYC 1001 - General Psychology and Society *Units: 5*
or
- PSYC 1005 - General Psychology for Healthier Living *Units: 5*
- PSYC 2020 - Methods of Investigation in Psychology *Units: 4*
- PSYC 3100 - Experimental Psychology *Units: 5*
- PSYC 3240 - Decision Theory *Units: 4*
or
- PSYC 4220 - Cognitive Processes *Units: 4*
or
- PSYC 4740 - Psycholinguistics *Units: 4*
- PSYC 3400 - Ergonomics and Human Factors *Units: 4*
or
- INDE 3190 - Human Factors Engineering *Units: 4*
- PSYC 3420 - Stress and Coping *Units: 4*
- PSYC 3500 - Social Psychology *Units: 4*
or
- PSYC 3540 - Groups and Organizations *Units: 4*
- PSYC 4200 - Conditioning and Learning *Units: 4*
- PSYC 4320 - Physiological Psychology *Units: 4*
- PSYC 4345 - Sensation and Perception *Units: 4*
- PSYC 4500 - Industrial Psychology *Units: 4*

Advanced Labs:

Two different courses from the following:

- PSYC 4800 - Human Learning and Cognition Laboratory *Units: 2*
- PSYC 4801 - Learning and Motivation Laboratory *Units: 2*
- PSYC 4802 - Sensation and Perception Laboratory *Units: 2*
- PSYC 4804 - Social and Personality Laboratory *Units: 2*
- PSYC 4806 - Developmental Psychology Laboratory *Units: 2*
- PSYC 4807 - Clinical Psychology Laboratory *Units: 2*
- PSYC 4808 - Industrial Psychology Laboratory *Units: 2*

Approved Internship:

- PSYC 4900 - Independent Study *Units: 1-4*

B. Other Requirements (28-32 units)

- CS 1160 - Introduction to Computer Science I *Units: 4*

Complete the following courses (24-28 units):

- MATH 1300 - Trigonometry and Analytic Geometry *Units: 4 4*

- PHYS 2701 - Introductory Physics: Force, Mass and Motion *Units: 4*
- PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism *Units: 4*
- PHYS 2703 - Introductory Physics: Light and Modern Physics *Units: 4*
or
- PHYS 1001 - General Physics: Newtonian Mechanics and Oscillations *Units: 5*
- PHYS 1002 - General Physics: Thermodynamics and Optics *Units: 5*
- PHYS 1003 - General Physics: Electromagnetism *Units: 5*

- STAT 1000 - Elements of Probability and Statistics *Units: 5*
and
- STAT 3010 - Statistical Methods in the Social Sciences *Units: 4*
or
- STAT 3502 - Statistical Inference I *Units: 4*
and
- STAT 3503 - Statistical Inference II *Units: 4*

Footnotes

4. Students with appropriate background can go directly to MATH 1304. These students are excused from MATH 1300.
5. MATH 2304 is required as a prerequisite to PHYS 1003.

C. Elective Concentration (8 units)

Two additional courses, both from the same group:

Computer Science Group:

- CS 2360 - Introduction to Computer Science II *Units: 4*
- Four additional units in CS courses

Engineering Group:

- INDE 3020 Work Design and Measurement *Units: 4*
- ENGR 3090 - Industrial Costs and Controls *Units: 4*

Mathematics Group:

- MATH 1304 - Calculus I *Units: 4*
- MATH 1305 - Calculus II *Units: 4*

Psychology Group:

Eight units of permissible upper division psychology courses in addition to those used to fulfill the other requirements in this major.

Statistics Group:

Eight units of upper division statistics courses, not including

- STAT 3010 - Statistical Methods in the Social Sciences *Units: 4*
- STAT 3502 - Statistical Inference I *Units: 4*
- STAT 3503 - Statistical Inference II *Units: 4*

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All courses required for the psychology B.A. major are offered in the evening program over each three-year cycle. However, the range of choices and flexibility of scheduling is more limited in the evening program.

Preparation

For Advanced Placement course equivalencies, see Registration.

Major Requirements (B.S.)

Students in the B.S. degree program must select either the Industrial/Organizational Psychology option or the Ergonomics and Human Factors option. The major with the option in Industrial/Organizational Psychology consists of 75 units; the major with the option in Ergonomics and Human Factors consists of 90-94 units; the B.S. degree requires a total of 180 units.

Industrial/Organizational Psychology Option (75 units)

A. Core Requirements (51 units)

- PSYC 1000 - General Psychology *Units: 5*
or PSYC 1001 (5)
or PSYC 1005 (5)
- PSYC 2020 - Methods of Investigation in Psychology *Units: 4*
- PSYC 3100 - Experimental Psychology *Units: 5*
- PSYC 3210 - Principles of Survey and Test Construction *Units: 4*
- PSYC 3400 - Ergonomics and Human Factors *Units: 4*
- PSYC 3500 - Social Psychology *Units: 4*
- PSYC 3540 - Groups and Organizations *Units: 4*
- PSYC 4200 - Conditioning and Learning *Units: 4*
- PSYC 4220 - Cognitive Processes *Units: 4*
- STAT 1000 - Elements of Probability and Statistics *Units: 5*
- STAT 3010 - Statistical Methods in the Social Sciences *Units: 4*

Advanced laboratories:

Two different courses from the following:

- PSYC 4800 - Human Learning and Cognition Laboratory *Units: 2*
- PSYC 4801 - Learning and Motivation Laboratory *Units: 2*
- PSYC 4802 - Sensation and Perception Laboratory *Units: 2*
- PSYC 4804 - Social and Personality Laboratory *Units: 2*
- PSYC 4806 - Developmental Psychology Laboratory *Units: 2*
- PSYC 4807 - Clinical Psychology Laboratory *Units: 2*
- PSYC 4808 - Industrial Psychology Laboratory *Units: 2*

B. Area Requirements (16 units)

Psychological Theory Applied in Industrial Specialties: Assessment, Selection, Performance Appraisal and Work Motivation (8 units)

Select 8 units from the following:

- PSYC 3200 - Psychological Tests *Units: 4*
- PSYC 3220 - Psychology of Individual Differences *Units: 4*
- PSYC 3230 - Applied Measurement *Units: 4*
- PSYC 3240 - Decision Theory *Units: 4*
- PSYC 3250 - Behavior Modification *Units: 4*
- PSYC 4300 - Motivation *Units: 4*
- PSYC 4500 - Industrial Psychology *Units: 4*

Psychological Theory Applied in Organizational Specialties: Group Processes, Cultural Diversity, Negotiation, and Leadership (8 units)

Select 8 units from the following:

- PSYC 3520 - Interpersonal Processes *Units: 4*
- PSYC 3550 - Social Influence and Change *Units: 4*
- PSYC 3560 - Psychology of Negotiation and Conflict Resolution *Units: 4*
- PSYC 3600 - The Impact of Culture on Social Psychology *Units: 4*

C. Electives (8 units)

Select 8 units from any combination of courses listed below. (Note: At least one Management course is recommended.)

1. Permissible upper division Psychology (PSYC) courses

(excludes PSYC courses whose course descriptions indicate that they may not be used to satisfy a Psychology major requirement)

2. The following courses from the Management program:

- MGMT 3600 - Theories of Management *Units: 4*
- MGMT 3610 - Strategic Human Resources Management *Units: 4*
- MGMT 3680 - Employee Relations and Employment Law *Units: 4*
- MGMT 4615 - Compensation and Reward Systems *Units: 4*
- MGMT 4618 - Human Resources Training and Development *Units: 4*

3. The following courses from the Statistics department:

- STAT 3510 - Sampling Procedures for Surveys *Units: 4*
- STAT 3900 - Data Analysis Using Statistical Packages *Units: 4*
- STAT 3910 - Statistical Software Usage *Units: 4*
- STAT 4000 - Analysis of Variance in the Behavioral Sciences *Units: 4*
- STAT 4515 - Applied Multivariate Analysis *Units: 4*
- STAT 4610 - Introduction to Nonparametric Statistical Methods *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Recreation, Recreation Management Option, B.S.

Program Description

The Department of Hospitality, Recreation and Tourism prepares students to become leaders in the recreation, tourism and hospitality sectors where they work to create opportunities for people to experience the highest quality of life possible. The purpose of the curriculum is to develop understanding of the importance of leisure in today's fast paced world and how as professionals they can have a positive impact on people, programs and communities. Students are provided educational opportunities which will develop their ability to organize, plan, and manage leisure, hospitality, and tourism service resources in diverse communities.

Leisure is the second largest income-producing sector in the world's economy and is the world's largest employer. Students are professionals upon graduation gaining positions where responsibilities are varied and opportunities are endless.

The department's experiential learning philosophy creates experiences where learning content happens while actually creating programs, events, and experiences for the people they want to serve. Helping people achieve a more satisfying quality of life is the job of all leisure professionals. Managers in recreation and parks, and recreation therapy are just a few of the fields open to our majors.

Student Learning Outcomes

Students who graduate with a B.S. in Recreation from Cal State East Bay will be able to:

1. Analyze and generate effective, sustainable solutions based on evidence and technology and provide relevant references.
2. Demonstrate significant knowledge of effective leadership and teamwork strategies, management skills, and evaluation of service quality and consumer needs through investigation and practical experience.
3. Articulate clearly (speak and write) ethical, philosophical, historical, and current practices and administrative foundations of the profession.
4. Demonstrate techniques that contribute to a culture of dignity and respect in the workplace.

Career Possibilities

- After-school Director
- Recreation Program Coordinator
- Recreation Therapist
- Youth Sports Director
- Event Manager
- Teen Coordinator
- Sports Coordinator
- Aquatics Manager
- Senior Center Manager
- Resort Manager

- Retirement Community Program Director
- Camp Director
- Preschool Director
- Country Club Manager

Features

Our student-centered department has programs designed for both on campus and online students. Our courses are offered in three formats: hybrid (one day a week in-class instruction with the remainder online), all instruction online, or in-class instruction on the weekends and between quarters. We are dedicated to helping you realize your dreams. Our friendly, accessible faculty will advise you about meeting all requirements in the most efficient manner. We have excellent industry contacts and can help connect you with professional part-time jobs to build your resume while in school. All our faculty have been Leisure and Hospitality industry professionals.

Major Requirements (B.S.)

Consult an advisor in your major department for clarification and interpretation of your major requirements. Some courses require prerequisites. The major with an option in Recreation Management consists of 102 units; and the major with an option in Recreation Therapy consists of 95 units; the B.S. degree requires a total of 180 units.

Core Requirements (40 units)

- REC 1000 - Introduction to Recreation *Units: 4*
- HOS 1100 - Introduction to Hospitality and Tourism *Units: 4*
- REC 2050 - Computers in Hospitality, Recreation and Tourism *Units: 2*
- REC 3000 - Philosophy of Leisure *Units: 4*
- REC 3010 - Service Learning in Hospitality, Recreation and Tourism 2 *Units: 4*
- REC 3300 - Leadership in Hospitality, Recreation and Tourism *Units: 4*
- REC 3701 - Evaluation and Research in Hospitality, Recreation and Tourism *Units: 4*
- REC 4050 - Social Justice in Hospitality, Recreation and Tourism *Units: 4*
- REC 4100 - Professional Issues in Hospitality, Recreation and Tourism *Units: 2*
- REC 4501 - Special Events Management 1 *Units: 4*
- HOS 4502 - Special Events Management 2 *Units: 4*

Recreation Management Option (62 units)

The Recreation Management Option prepares students for management and leadership professional positions in public settings where increasing the quality of life through people, parks and programs is the main objective. Jobs include program directors and coordinators for sports, after-school, seniors, youth development, aquatics, adult services, preschool and teens. Many of our graduates are upper management leaders in East Bay leisure services organizations including Concord, Livermore, Oakland, Pleasanton, San Ramon, and East Bay Regional Parks (a small sample).

Job duties are varied and are focused on providing quality of life services in municipal, special districts, county, state and national park and recreation organizations. Many majors also work in the non-profit sector for YMCA, Boys and Girls Club and other youth organizations. Emerging opportunities with active senior living organizations owned and managed by hospitality leaders like Marriott and Hilton offer the chance to increase the quality of life of our aging population.

Required Option Courses (46 units)

- HOS 4520 - Promotion of Leisure and Hospitality *Units: 4*
- HOS 4530 - Principles of Meetings, Conventions and Special Events *Units: 4*
- REC 2200 - Programming in Leisure Services *Units: 4*
- REC 3401 - Leadership of Small Groups *Units: 4*
- REC 3510 - Management and Supervision in Hospitality, Recreation and Tourism *Units: 4*
- REC 4000 - Administration and Budgeting in Recreation *Units: 4*

- REC 4011 - Youth Development through Leisure *Units: 4*
- REC 4300 - Facilities Management and Administration in Leisure *Units: 4*
- REC 4896 - Recreation Management Internship Placement *Units: 2*
- REC 4910 - Recreation Management Internship and Senior Project *Units: 4-12*

Electives (16 units)

- HDEV 3800 - Human Development and Interaction *Units: 4*
- HOS 4530 - Principles of Meetings, Conventions and Special Events *Units: 4*
- HOS 4540 - Fiscal Leadership for Operational Managers *Units: 4*
- HOS 4550 - Global Tourism *Units: 4*
- HOS 4560 - Food and Beverage Management *Units: 4*
- MKTG 3495 - Business Communication *Units: 4*
- PSYC 3420 - Stress and Coping *Units: 4*
- PSYC 3500 - Social Psychology *Units: 4*
- PSYC 3520 - Interpersonal Processes *Units: 4*
- PSYC 3540 - Groups and Organizations *Units: 4*
- PSYC 3550 - Social Influence and Change *Units: 4*
- PSYC 4410 - Abnormal Psychology *Units: 4*
- PSYC 4430 - Developmental Psychology *Units: 4*
- REC 2100 - Leadership Principles in Action *Units: 4*
- REC 2500 - Service Learning in Leadership, Hospitality and Leisure 1 *Units: 1-4*
- REC 3200 - Wellness Through Leisure *Units: 4*
- REC 3202 - Women and Leisure *Units: 4*
- REC 3401 - Leadership of Small Groups *Units: 4*
- REC 3999 - Issues in Hospitality and Leisure Services *Units: 1-4*
- REC 4011 - Youth Development through Leisure *Units: 4*
- REC 4600 - Recreation Therapy Documentation and Assessment *Units: 4*
- REC 4601 - Recreation Therapy Treatment and Program Planning *Units: 4*
- REC 4602 - Recreation Therapy Processes *Units: 4*
- REC 4603 - Recreation Therapy Programming *Units: 4*
- REC 4605 - Recreation Therapy: Treatment and Diagnostic Groups *Units: 4*
- REC 4900 - Independent Study *Units: 1-4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Recreation, Recreation Therapy Option, B.S.

Program Description

The Department of Hospitality, Recreation and Tourism prepares students to become leaders in the recreation, tourism and hospitality sectors where they work to create opportunities for people to experience the highest quality of life possible. The purpose of the curriculum is to develop understanding of the importance of leisure in today's fast paced world and how as professionals they can have a positive impact on people, programs and communities. Students are provided educational opportunities which will develop their ability to organize, plan, and manage leisure, hospitality, and tourism service resources in diverse communities.

Leisure is the second largest income-producing sector in the world's economy and is the world's largest employer. Students are professionals upon graduation gaining positions where responsibilities are varied and opportunities are endless.

The department's experiential learning philosophy creates experiences where learning content happens while actually creating programs, events, and experiences for the people they want to serve. Helping people achieve a more satisfying quality of life is the job of all leisure professionals. Managers in recreation and parks, and recreation therapy are just a few of the fields open to our majors.

Student Learning Outcomes

Students who graduate with a B.S. in Recreation from Cal State East Bay will be able to:

1. Analyze and generate effective, sustainable solutions based on evidence and technology and provide relevant references.
2. Demonstrate significant knowledge of effective leadership and teamwork strategies, management skills, and evaluation of service quality and consumer needs through investigation and practical experience.
3. Articulate clearly (speak and write) ethical, philosophical, historical, and current practices and administrative foundations of the profession.
4. Demonstrate techniques that contribute to a culture of dignity and respect in the workplace.

Career Possibilities

- After-school Director
- Recreation Program Coordinator
- Recreation Therapist
- Youth Sports Director
- Event Manager
- Teen Coordinator
- Sports Coordinator
- Aquatics Manager
- Senior Center Manager
- Resort Manager
- Retirement Community Program Director
- Camp Director
- Preschool Director
- Country Club Manager

Features

Our student-centered department has programs designed for both on campus and online students. Our courses are offered in three formats: hybrid (one day a week in-class instruction with the remainder online), all instruction online, or in-class instruction on the weekends and between quarters. We are dedicated to helping you realize your dreams. Our friendly, accessible faculty will advise you about meeting all requirements in the most efficient manner. We have excellent industry contacts and can help connect you with professional part-time jobs to build your resume while in school. All our faculty have been Leisure and Hospitality industry professionals.

Major Requirements (B.S.)

Consult an advisor in your major department for clarification and interpretation of your major requirements. Some courses require prerequisites. The major with an option in Recreation Management consists of 102 units; and the major with an option in Recreation Therapy consists of 95 units; the B.S. degree requires a total of 180 units.

Core Requirements (40 units)

- REC 1000 - Introduction to Recreation *Units: 4*
- HOS 1100 - Introduction to Hospitality and Tourism *Units: 4*
- REC 2050 - Computers in Hospitality, Recreation and Tourism *Units: 2*

- REC 3000 - Philosophy of Leisure *Units: 4*
- REC 3010 - Service Learning in Hospitality, Recreation and Tourism 2 *Units: 4*
- REC 3300 - Leadership in Hospitality, Recreation and Tourism *Units: 4*
- REC 3701 - Evaluation and Research in Hospitality, Recreation and Tourism *Units: 4*
- REC 4050 - Social Justice in Hospitality, Recreation and Tourism *Units: 4*
- REC 4100 - Professional Issues in Hospitality, Recreation and Tourism *Units: 2*
- REC 4501 - Special Events Management 1 *Units: 4*
- HOS 4502 - Special Events Management 2 *Units: 4*

Recreation Therapy Option (55 units)

The Recreation Therapy option is designed to prepare students to work as allied health professionals with people who have special needs in clinical, residential, and community-based agencies. This option is specifically designed to meet the standards developed by the National Council for Therapeutic Recreation Certification (NCTRC) and the California Board of Recreation and Park Certification. Successfully completing this curriculum will provide students with knowledge competencies necessary to qualify for both the National and State Therapeutic Recreation Certification Exams. Our program is accredited by the California Board of Recreation and Park Certification.

Many graduates of this option are leaders in Recreation Therapy in the San Francisco Bay Area. They work in rehabilitation hospitals, drug treatment programs, mental health clinics and inpatient programs, state hospitals, long term care facilities, prisons and schools to name just a few.

Required Option Courses (51 units)

- BIOL 2010 - Human Physiology and Anatomy I *Units: 5*
or
- BIOL 2011 - Anatomy and Physiology I *Units: 5*
- HDEV 3800 - Human Development and Interaction *Units: 4*
or
- PSYC 4420 - Developmental Psychology *Units: 4*
- PSYC 4410 - Abnormal Psychology *Units: 4*
- REC 3800 - Introduction to Recreation Therapy *Units: 4*
- REC 4600 - Recreation Therapy Documentation and Assessment *Units: 4*
- REC 4601 - Recreation Therapy Treatment and Program Planning *Units: 4*
- REC 4602 - Recreation Therapy Processes *Units: 4*
- REC 4603 - Recreation Therapy Programming *Units: 4*
- REC 4605 - Recreation Therapy: Treatment and Diagnostic Groups *Units: 4*
- REC 4897 - Recreation Therapy Internship Placement *Units: 2*
- REC 4911 - Recreation Therapy Internship and Senior Project *Units: 12*

Electives (4 units)

- HDEV 3301 - Child Development *Units: 4*
- HDEV 3302 - Foundational Aspects of Adolescent Development *Units: 4*
- HDEV 3303 - Adult Development and Aging *Units: 4*
- HDEV 4110 - Child Cognitive Development *Units: 4*
- HSC 3300 - Health Care Systems in the U.S. *Units: 4*
- HSC 4010 - Research and Program Evaluation in Health Science *Units: 4*
- PSYC 3250 - Behavior Modification *Units: 4*
- PSYC 3420 - Stress and Coping *Units: 4*
- PSYC 3500 - Social Psychology *Units: 4*
- PSYC 3520 - Interpersonal Processes *Units: 4*
- PSYC 3540 - Groups and Organizations *Units: 4*

- PSYC 3550 - Social Influence and Change *Units: 4*
- PSYC 4602 - Advanced Recreation Therapy Modalities *Units: 1*
- PSYC 4603 - Recreation Therapy Programming *Units: 4*
- SOC 3419 - Death and Dying *Units: 4*
- SOC 3425 - Prejudice and Discrimination *Units: 4*
- SOC 3520 - Sociology of Race and Ethnic Relations *Units: 4*
- SOC 3720 - Human Behavior in the Social Environment *Units: 4*
- SOC 3730 - Juvenile Delinquency *Units: 4*
- SOC 3750 - Alcohol and Drug Abuse *Units: 4*
- SOC 4720 - Medical Sociology *Units: 4*
- SOC 4750 - Child Welfare *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Sociology, Social Services Option, B.A.

Program Description

Cal State East Bay offers a major in Sociology that leads to the Bachelor of Arts degree. The major contains two options: (1) Sociology, Sociology Option, B.A. and (2) Sociology, Social Services Option, B.A.

The Sociology, Sociology Option, B.A. is designed for students with career interests in the public sector or business or entry into law school, public administration, or graduate work in a number of fields. Sociology, Sociology Option, B.A. students must take three of five courses in the area of social diversity. Any of the upper division courses offered by the department may be used to complete the additional 28 required units.

The Sociology, Social Services Option, B.A. is designed to prepare students for beginning practice in a social services agency or going on to graduate study in social work, counseling or public administration. In the Sociology, Social Services Option, B.A., students take a variety of courses including two quarters of field placement, where they work for credit in a social services agency.

The core requirements for all majors include courses in social theory and research methods. The research methods sequence includes training in applied social research and computer applications for the social sciences.

Student Learning Outcomes

Students graduating with a B.A. in Sociology from Cal State East Bay will be able to:

1. read and analyze sociological data and, thus, be able to critically examine "knowledge" veracity by mastering appropriate research methods, including: 1) data collection, 2) sampling, and 3) data analysis.
2. engage (orally and in writing) in educated, open-minded discussions of diverse sociocultural beliefs, perspectives, and norms.
3. understand and embrace social diversity, and critically analyze cultural representations of oppressed populations, while working toward equity and empowerment.
4. work collaboratively in diverse groups, and when appropriate to their educational path, successfully complete service in community social service practicum.
5. promote sustainability by acquiring knowledge of local, national and global socioeconomic policies and practices that contribute to poverty, resource scarcity, violence, exploitation, and environmental degradation, as well as explore ethical, responsible alternatives to those policies.
6. critically read, interpret, integrate and synthesize abstract sociological arguments and theories.

Career Opportunities

- Correctional Officer
- Criminologist
- Employee Relations Representative
- Employment Counselor
- Human Resource Representative
- Industrial Sociologist
- Market Research Analyst
- Migration Specialist
- Occupational Analyst
- Parole Officer
- Public Health Statistician
- Public Relations Representative
- Research Assistant
- Social Ecologist
- Social Worker
- Teacher
- Urban Planner
- Urban Sociologist
- Vocational Rehabilitation Counselor

Features

The department faculty includes both sociologists and social workers who have expertise in the areas of family and interpersonal relationships, social theory, drug and alcohol abuse, applied social research, demography, aging, urban sociology, sports and leisure, sexuality, social conflict and violence, crime, international development, culture, social psychology, emotions, medical sociology, and minority and immigrant groups.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 61 units; the B.A. degree requires a total of 180 units.

Lower Division Core (4 units)

- SOC 1000 - Introduction to Sociology *Units: 4*
or
- SOC 1002 - Introduction to Sociology of Individual and Society *Units: 4*

Upper Division Core (12 units)

- SOC 3310 - Sociological Theory *Units: 4*
- SOC 4111 - Methods of Sociological Research I *Units: 4*
- SOC 4112 - Methods of Sociological Research II *Units: 4*

Courses in Supporting Fields (5-17 units)

- STAT 1000 - Elements of Probability and Statistics *Units: 5*
- See *Option Electives* above for Statistics substitutions for Sociology electives.

Social Services Option (40 units)

- SOC 3425 - Prejudice and Discrimination *Units: 4*

or

- SOC 3520 - Sociology of Race and Ethnic Relations *Units: 4*
- SOC 3700 - Introduction to Social Services *Units: 4*
- SOC 3710 - Social Policy *Units: 4*
- SOC 3720 - Human Behavior in the Social Environment *Units: 4*
- SOC 4716 - Social Work Theories and Methods *Units: 4*
- SOC 4718 - Field Practicum *Units: 4*
- SOC 4719 - Field Practicum Seminar *Units: 2*
- Option electives: Complete 8 units from upper division Sociology courses. (Up to 8 units of upper division Statistics courses, selected under advisement, may be counted as Sociology electives.)

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Sociology, Sociology Option, B.A.

Program Description

Cal State East Bay offers a major in Sociology that leads to the Bachelor of Arts degree. The major contains two options: (1) Sociology, Sociology Option, B.A. and (2) Sociology, Social Services Option, B.A.

The Sociology, Sociology Option, B.A. is designed for students with career interests in the public sector or business or entry into law school, public administration, or graduate work in a number of fields. Sociology, Sociology Option, B.A. students must take three of five courses in the area of social diversity. Any of the upper division courses offered by the department may be used to complete the additional 28 required units.

The Sociology, Social Services Option, B.A. is designed to prepare students for beginning practice in a social services agency or going on to graduate study in social work, counseling or public administration. In the Sociology, Social Services Option, B.A., students take a variety of courses including two quarters of field placement, where they work for credit in a social services agency.

The core requirements for all majors include courses in social theory and research methods. The research methods sequence includes training in applied social research and computer applications for the social sciences.

Student Learning Outcomes

Students graduating with a B.A. in Sociology from Cal State East Bay will be able to:

1. read and analyze sociological data and, thus, be able to critically examine "knowledge" veracity by mastering appropriate research methods, including: 1) data collection, 2) sampling, and 3) data analysis.
2. engage (orally and in writing) in educated, open-minded discussions of diverse sociocultural beliefs, perspectives, and norms.
3. understand and embrace social diversity, and critically analyze cultural representations of oppressed populations, while working toward equity and empowerment.
4. work collaboratively in diverse groups, and when appropriate to their educational path, successfully complete service in community social service practicum.
5. promote sustainability by acquiring knowledge of local, national and global socioeconomic policies and practices that contribute to poverty, resource scarcity, violence, exploitation, and environmental degradation, as well as explore ethical, responsible alternatives to those policies.
6. critically read, interpret, integrate and synthesize abstract sociological arguments and theories.

Career Opportunities

- Correctional Officer
- Criminologist
- Employee Relations Representative
- Employment Counselor
- Human Resource Representative
- Industrial Sociologist
- Market Research Analyst
- Migration Specialist
- Occupational Analyst
- Parole Officer
- Public Health Statistician
- Public Relations Representative
- Research Assistant
- Social Ecologist
- Social Worker
- Teacher
- Urban Planner
- Urban Sociologist
- Vocational Rehabilitation Counselor

Features

The department faculty includes both sociologists and social workers who have expertise in the areas of family and interpersonal relationships, social theory, drug and alcohol abuse, applied social research, demography, aging, urban sociology, sports and leisure, sexuality, social conflict and violence, crime, international development, culture, social psychology, emotions, medical sociology, and minority and immigrant groups.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 61 units; the B.A. degree requires a total of 180 units.

Lower Division Core (4 units)

- SOC 1000 - Introduction to Sociology *Units: 4*
or
- SOC 1002 - Introduction to Sociology of Individual and Society *Units: 4*

Upper Division Core (12 units)

- SOC 3310 - Sociological Theory *Units: 4*
- SOC 4111 - Methods of Sociological Research I *Units: 4*
- SOC 4112 - Methods of Sociological Research II *Units: 4*

Courses in Supporting Fields (5-17 units)

- STAT 1000 - Elements of Probability and Statistics *Units: 5*
- See *Option Electives* above for Statistics substitutions for Sociology electives.

Sociology Option (40 units)

a. Three of the following diversity courses (12 units):

- SOC 3200 - Social Demography *Units: 4*
- SOC 3420 - Social Inequality *Units: 4*
- SOC 3425 - Prejudice and Discrimination *Units: 4*
- SOC 3520 - Sociology of Race and Ethnic Relations *Units: 4*
- SOC 3710 - Social Policy *Units: 4*
- SOC 4790 - Social Control and Society *Units: 4*

b. Option electives:

Complete 28 units from upper division Sociology courses. Up to 12 units of upper division Statistics, selected under advisement, may be counted as Sociology electives.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Spanish, B.A.

Program Description

The Department of Modern Languages and Literatures at Cal State East Bay offers courses of study leading to a Bachelor of Arts degree with majors in French and Spanish. Academic Minors are offered in French, German, Italian, Portuguese, Russian, Sign Language, Spanish and Chinese Language and Cultural Studies. Elementary courses are offered also in Filipino and Japanese. All programs have been designed to provide students with the cultural understanding and the academic knowledge necessary for future pursuits in the teaching of foreign languages and literatures or for graduate work in the same fields. Students may utilize other languages and literatures offered in the department as part of a Special Major in various area studies.

An International Studies, B.A. is administered through the Department of Political Science (Undergraduate). The International Studies major consists of an integrated group of courses reflecting international aspects of various disciplines and requires intermediate level competency in a modern language. It is designed to provide the student with a broad base of understanding of the interrelationship of the world community, while at the same time providing the opportunity to specialize in an area of interest. An International Studies Minor is also offered. See the listing under International Studies for further details.

With the growing involvement of the United States in international business and the increasingly multicultural character of American society itself, the importance of foreign languages in nearly every kind of occupation is considerable. The majors in foreign languages and literatures, therefore, may lead to teaching careers and represent direct, practical assets in other fields such as business, industry and commerce, civil service, law, library science, media, science, health services, social work, travel, and tourism.

Student Learning Outcomes

Students graduating with a French, B.A. or a Spanish, B.A. from Cal State East Bay will be able to:

1. express themselves with sufficient accuracy and clarity to carry on conversations in French or Spanish with native speakers and to give oral presentations appropriate to the Undergraduate level;
2. express themselves in the written language with a fair amount of sophistication, integrate research information into written assignments, giving adequate credit to the sources of information used, demonstrate critical and creative thinking while applying analytical and qualitative reasoning to address complex challenges and everyday problems
3. be familiar with the major writers, periods, and genres of French literature (France and other French speaking regions throughout the world: Africa, The Caribbean, Canada, Belgium and Switzerland) or, Spanish and/or Spanish American literature (Spain, Mexico, Central America, the Caribbean, South America, and other Spanish speaking regions throughout the world). Students should be able to relate the works and genres to the socio-historical context in which they developed; and

4. demonstrate that they have acquired knowledge of the cultural diversity of literatures in the French or Spanish-speaking world while developing an appreciation of the French or Spanish (and/or Spanish American) cultural contributions to the body of universal culture such as literature, art, music, cinema, and history.

Career Opportunities

- Teaching
- Business
- Industry and Commerce
- Law and Law Enforcement
- Library Science
- Mass Communication
- Health and Social Services
- Travel and Tourism
- Translation and Interpretation
- Government Service

Features

The department faculty come from a wide variety of national and academic backgrounds and have traveled extensively in the countries whose languages they are teaching. Slides, films, dramatic performances, potluck dinners and other activities provide the opportunity for students to interact with one another and with their professors. For those who wish to further their interest in a foreign culture and language, the Department of Modern Languages and Literatures offers clubs. Foreign Language Clubs include the French Club, the German Club, the Tomodachi Club (Japanese Cultural Club), and the Spanish Language Club.

For those who wish to accelerate their learning of another language, the department offers a Summer quarter intensive program in Spanish which covers one year's work in one quarter and yields twelve units of credit. The language laboratory is another useful feature of the department. In the laboratory students can listen to tapes which help improve their pronunciation, fluency, and comprehension. In addition, students are encouraged to take advantage of the California State University International Programs. They can take courses in a variety of universities abroad and apply them towards a degree at Cal State East Bay.

Preparation

For students to enroll at the proper level of language instruction, the department recommends the following guideline: one year of high school foreign language instruction equals one quarter of Cal State East Bay instruction. Students are expected not to repeat credit already earned in high school unless significant time has passed since the initial instruction. The department offers placement exams to facilitate student placement. Students should contact the department before enrolling in a lower division language class.

Students in foreign language majors, minors, and options may have lower division language requirements waived for those courses below the level at which they enroll.

Advanced Placement

A student who has successfully completed the advanced placement course in a foreign language or literature in high school and has a score of 3 or better on the Advanced Placement Examination will receive 8-12 units of credit equivalent to two or three courses of a foreign language as listed below.

If you have completed the French Language examination with a score of 3 or better, you will receive 12 units of credit equivalent to MLL 2101, MLL 2102, and MLL 2103. If you have completed the German Language examination with a score of 3 or better, you will receive 12 units of credit equivalent to intermediate German coursework. If you have completed the Spanish Language examination with a score of 3 or better, you will receive 12 units of credit equivalent to MLL 2401, MLL 2402, and MLL 2403. If you have completed the Spanish Literature examination with a score of 3 or better, you will receive 8 units of credit equivalent to MLL 3400 and MLL 4455.

Major Requirements (B.A.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements.

Spanish

The Spanish major consists of 44-72 units; the B.A. degree requires a total of 180 units. Students are expected to consult with Spanish division advisors in order to assure a well balanced program of upper division courses. Proficiency in another foreign language is strongly recommended.

A. Lower Division (0-28 units)

- MLL 1401 - Elementary Spanish I *Units: 4*
- MLL 1402 - Elementary Spanish II *Units: 4*
- MLL 1403 - Elementary Spanish III *Units: 4*
- MLL 2401 - Intermediate Spanish I *Units: 4*
- MLL 2402 - Intermediate Spanish II *Units: 4*
- MLL 2403 - Intermediate Spanish III *Units: 4*
- MLL 2410 - Spanish Conversation *Units: 4*

B. Upper Division (44 units)

1. The following courses:

- MLL 3401 - Advanced Spanish Composition and Syntax, I *Units: 4*
- MLL 3402 - Advanced Spanish Composition and Syntax, II *Units: 4*
- MLL 3403 - Advanced Spanish Composition and Syntax, III *Units: 4*
- MLL 3411 - Introduction to Spanish Linguistics *Units: 4*

2. Eight (8) units of Spanish American Literature from among the following courses:

- MLL 3461 - Introduction to Spanish-American Literature: 1492 to 1900 *Units: 4*
- MLL 3463 - Introduction to Spanish-American Literature: 1900 to the Present *Units: 4*
- MLL 3495 - Spanish-American Culture and Civilization *Units: 4*
- MLL 4495 - A Single Movement, Country or Theme: Spanish American Literature *Units: 4*

3. Eight (8) units of Spanish Peninsular Literature from among the following courses:

- MLL 4455 - Studies in the Golden Age of Spain *Units: 4*
- MLL 4460 - Studies in 20th Century Spanish Literature *Units: 4*

4. Twelve (12) additional units should be selected from among all upper division Spanish courses.

(Note: Courses numbered MLL 4455, MLL 4460, and MLL 4495 may be repeated as content changes. If repeated, the courses may be applied to more than one category of requirements: Groups 2 and 4 or Groups 3 and 4)

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Speech Pathology and Audiology, B.S.

Program Description

Speech-language pathology and audiology are the professions which help adults and children overcome disabilities of speech, language, and/or hearing. These professions can satisfy a wide variety of career interests, including working in an allied medical profession, public service, government, education and private industry. Through research, these professions also contribute to our knowledge about human communication.

Many students select this degree program for professional training in speech-language pathology; others select this major because it seeks to develop student patterns of clear and logical thinking, planning, decision making and writing. Drawing from such academic disciplines as biology, psychology, sociology, linguistics, medicine, and the physical sciences, the program offers an interdisciplinary character that encourages and fosters an emphasis on acquiring the broad knowledge of a liberal arts general education, as well as developing expertise in a single discipline. Many of our undergraduate majors have used these attributes to successfully pursue careers other than speech-language pathology, and have gone on to fields of education, finance, business, and government services.

Student Learning Outcomes

Students graduating with a B.S. in Speech-Language Pathology will be able to:

1. Complete foundational academic coursework in preparation for advanced professional training in speech-language pathology or related disciplines;
2. Integrate knowledge from basic and behavioral sciences and humanities with contemporary theory and practice in speech-language pathology;
3. Describe typical and atypical communicative development and behavior across the lifespan;
4. Demonstrate skills in working collaboratively;
5. Explain the importance of cultural competence, social justice, ethics, and advocacy in serving diverse individuals.

Career Opportunities

- Audiologist
- Communications Specialist
- Consultant
- Professor/Teacher
- Research Assistant

Features

The department operates the Speech, Language and Hearing Clinic, an on-campus facility that provides clinical services to speech-, language-, and hearing-impaired individuals from Bay Area Communities. Students who are enrolled in the program are able to observe, receive training, and do research in this fully-equipped facility. The program also maintains a fully equipped speech and hearing sciences laboratory for students who wish to pursue research interests.

The Department of Communicative Sciences and Disorders offers the coursework required to qualify as a registered audiometrist in the public schools of the State of California.

The Bachelor of Science degree major in Speech-Language Pathology provides students with a background in theoretical and clinical areas fundamental to the understanding and management of communicative disorders and serves as the pre-professional training necessary for admission to graduate studies.

Major Requirements (B.S.)

The B.S. degree in Speech Pathology and Audiology is designed to prepare the student to pursue graduate training in speech-language pathology or audiology or, employment in related fields. Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 100 units. The B.S. degree requires a total of 180 units.

I. Lower Division (24 units)

- BIOL 1000 - Basic Concepts in Biology *Units: 5*
or BIOL 1001 Introduction to Biology (or BIOL 1005), and BIOL 1002 Introduction to Biology Lab (or 1004 or 1005) *Units: 5*
- BIOL 2010 - Human Physiology and Anatomy I *Units: 5*
or
- BIOL 2011 - Anatomy and Physiology I *Units: 5*
- PSYC 1000 - General Psychology *Units: 5*
or
- PSYC 1001 - General Psychology and Society *Units: 5*
or
- PSYC 1005 - General Psychology for Healthier Living *Units: 5*
- SPPA 2850 - Introduction to Communication Disorders *Units: 4*
- STAT 1000 - Elements of Probability and Statistics *Units: 5*

II. Upper Division (62 units plus required units in track)

- SPPA 3852 - Speech, Language and Communication Development Across the Lifespan *Units: 4*
- SPPA 3854 - Anatomy and Physiology of Speech *Units: 4*
- SPPA 3855 - Phonetics *Units: 4*
- SPPA 3856 - Observation of Clinical Procedures in Communicative Disorders *Units: 2*
- SPPA 3859 - Theory and Practice of Audiology I *Units: 4*
- HDEV 4110 - Child Cognitive Development *Units: 4*
or
- PSYC 4420 - Developmental Psychology *Units: 4*
- SPPA 4852 - Clinical Methods and Procedures in Communicative Disorders *Units: 3*
- SPPA 4859 - Evidence-based Practice in Communicative Sciences and Disorders *Units: 4*
- SPPA 4861 - Hearing Assessment: Instrumentation and Behavioral *Units: 5*
- SPPA 4862 - Organic and Low Incidence Speech Disorders *Units: 4*
- SPPA 4863 - Articulation and Phonological Disorders *Units: 4*
- SPPA 4865 - Language Disorders in Children *Units: 4*
- SPPA 4866 - Neurocognitive Communication Disorders *Units: 4*
- SPPA 4867 - Speech Science *Units: 4*
- SPPA 4868 - Cultural and Linguistic Diversity *Units: 4*
- SPPA 4869 - Neuroanatomy and Neurophysiology of the Speech, Language and Hearing Mechanism *Units: 4*

Track Requirements

Required for Honors Clinic Track (7 units)

- SPPA 4854 - Diagnosis of Speech and Language Disorders *Units: 4*
- SPPA 4856 - Practicum in Speech-Language Pathology *Units: 3*

III. Elective Courses (7 or 14 units)

Each student enrolled in this major must complete upper division courses in related disciplines; these courses are subject to adviser approval. The minimum number of elective units is 7 if the student is eligible for the Honors Clinic Track, 14 elective units if not.

Courses may be chosen from areas such as psychology, human development, linguistics and sign language. Students are responsible for any required prerequisites for elective courses.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Statistics, B.S.

Program Description

Statistics is the study of designing experiments and surveys, and evaluating the collected data. This rapidly growing science is widely used to make predictions about future events based on patterns observed in the past and to draw accurate inferences about large groups on the basis of a representative sample from the group. Economic forecasts and public opinion polls are examples of these kinds of statistical methods.

The methodology of statistics can be adapted to many types of problems. Due to the extensive development of computers and the collection of large databases, the need for statistical techniques has greatly expanded in the past few decades. A society like ours, which has become increasingly dependent on its data, has a growing need for statisticians.

Student Learning Outcomes

Students graduating with a Statistics, B.S. from Cal State East Bay will be able to:

apply basic computational skill in descriptive statistics and graphical displays; hypothesis testing and confidence intervals; modeling and error analysis;

communicate to others results involving descriptive statistics and graphical displays; hypothesis testing and confidence intervals; modeling and error analysis;

analyze data using appropriate statistical computer software and to interpret the results covering descriptive statistics and graphical displays; hypothesis testing and confidence intervals; modeling and error analysis.

Career Opportunities

- Actuary
- Biostatistician
- Business Executive
- Census Analyst
- Credit Analyst
- Data Analyst
- Economist
- Financial Modeling Specialist
- Forms Analyst
- Information Systems Analyst
- Insurance Agent
- Market Researcher
- Oddsmaker
- Quality Control Specialist
- Research Statistician
- Sales Analyst
- SAS Programmer
- Statistician
- Survey Designer
- Systems Analyst
- Teacher

Preparation

For Advanced Placement course equivalencies, see Registration.

The theory of statistics rests on a mathematical foundation. Even for statisticians whose primary interest is in applications, challenging mathematical problems arise continually. Calculus and computer programming are required for the major. An elementary course in linear algebra is highly recommended.

Courses in areas to which statistics is applied will also be helpful. Examples are business, biology, chemistry, geography, social sciences, psychology, and physics.

Community college students are advised to complete the sequence of elementary calculus and analytic geometry courses before transferring to Cal State East Bay. Another excellent lower-division requirement to complete before transferring is a course in introductory computer programming.

Honors in Statistics

Students earning a GPA of 3.6 or higher in courses comprising their major in Statistics will be awarded Honors in the degree provided the coursework applied toward the degree includes the courses listed in areas I and II below.

I. Required Courses for Honors (16 units)

- MATH 2101 Elements of Linear Algebra
- MATH 2304 Calculus III
- MATH 3100 Linear Algebra
- STAT 3402 Introduction to Probability Theory II

II. Required Honors Course (4 units)

- STAT 4401 Introduction to Stochastic Processes or STAT 4601 Regression taken as a special honors course with permission of the instructor and the Director of the Honors Program.

Major Requirements (B.S.)

Please consult an advisor in your major department for clarification and interpretation of your major requirements. The major consists of 68-77 units; the B.S. degree requires a total of 180 units.

I. Basic Requirements (16-25 units)

- MATH 1304 - Calculus I *Units: 4*
- MATH 1305 - Calculus II *Units: 4*
[prerequisite: MATH 1300 (4) or equivalent]

One of the following (4 units):

- CS 1020 - Introduction to Computers *Units: 4*
or
- CS 1160 - Introduction to Computer Science I *Units: 4*

One of the following (4-9 units including prerequisite course):

- STAT 3010 - Statistical Methods in the Social Sciences *Units: 4* [prerequisite, STAT 1000 (5)]
- STAT 3031 - Statistical Methods in Biology *Units: 4*
- MGMT 3100 - Decision Science *Units: 4* [prerequisite, STAT 2010 (5)]
- MATH 2101 - Elements of Linear Algebra *Units: 4*
- MATH 2304 - Calculus III *Units: 4*

II. Mathematical Statistics and Probability (32 units)

- STAT 3401 - Introduction to Probability Theory I *Units: 4*
- STAT 3502 - Statistical Inference I *Units: 4*
- STAT 3503 - Statistical Inference II *Units: 4*

- STAT 3900 - Data Analysis Using Statistical Packages *Units: 4*
or
- STAT 4950 - Advanced Statistical Packages for Data Analysis *Units: 4*

- STAT 4601 - Regression *Units: 4*

Any 3 of the following courses (12 units):

- STAT 3402 - Introduction to Probability Theory II *Units: 4*
- STAT 3510 - Sampling Procedures for Surveys *Units: 4*
- STAT 3910 - Statistical Software Usage *Units: 4*
- STAT 4910 - Advanced Statistical Package Usage *Units: 4*
- STAT 4401 - Introduction to Stochastic Processes *Units: 4*
- STAT 4515 - Applied Multivariate Analysis *Units: 4*
- STAT 4610 - Introduction to Nonparametric Statistical Methods *Units: 4*

III. Area of Emphasis (20 units)

Complete one of the following:

1. Twenty units of approved mathematics or statistics courses in addition to those used for the requirements in Sections I and II. MATH 3100, Linear Algebra, or MATH 3300, Intermediate Analysis, should normally be included in these 20 units. These courses are especially recommended for students wishing to apply to the master's degree program in Statistics. MATH 3100 or MATH 3300 is required for students in the departmental honors program.
2. Twenty units of approved courses in an approved area. Areas currently approved include the following: Anthropology, Biological Science, Business/Economics, Chemistry, Computer Science, Geography, Geological Sciences, History, Physics, Political Science, Psychology, Sociology. For a complete list of currently approved areas, contact the Department of Statistics and Biostatistics. To gain departmental approval, these courses must include at least one upper division course and be judged to constitute a coherent program of study. (With the approval of the department, upper division Statistics courses, except STAT 3010, and STAT 3031, may be applied toward these twenty units.)

Credit/No Credit Courses

It is the policy of the department that no course taken on a "CR/NC" basis may be applied toward any of the requirements of Section II above. Individual petitions for waiver of this policy will be treated according to the same procedures as petitions to waive other degree requirements.

Double Major

A knowledge of statistical methods is of increasing importance to students in many areas, especially the physical, computing, decision, environmental, biological, political, and social sciences and administrative studies (including business, health care, and education). A second major in statistics along with a major in one of these areas may result in better preparation for employment or graduate study. The following three factors combine to make such a double major feasible in many cases:

1. The Statistics major allows for a relatively large number of completely unrestricted elective units. The student may elect courses required for the other major among these.
2. Up to twenty units in certain areas outside of Statistics may be applied toward the Statistics degree. (See Area of Emphasis requirement, III.2.)
3. Some other majors require Statistics courses that also count towards the Statistics major (e.g., STAT 3010, STAT 3031, STAT 3401, STAT 3502, etc.).

To obtain an illustrative program contact the Department of Statistics and Biostatistics.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Theatre Arts, Acting Option, B.A.

Program Description

The Department of Theatre and Dance provides comprehensive pre-professional training in the areas of acting, directing, dance, design, theatre technology, and musical theatre. The primary goal of the program is to develop artists whose performance skills and creativity are supported by a firm background in history, literature, and aesthetics. In an environment designed to encourage creativity and self-expression, each student has opportunities to participate in various specializations within the major-acting, costuming, dance, directing, scenery, lighting, sound, creative vision, or management. Students perform regularly in a variety of theatre and dance productions.

Theatre Arts graduates acquire a range of skills. This enables them to pursue different professional options. Many have entered advanced studies in nationally recognized universities and conservatories. Some have chosen careers in teaching, while others have gone directly into theatre or dance performance. Alumni perform on professional stages around the world, including Broadway and Hollywood. Some have been nominated for Tonys, Emmys, and Oscars; and, one designer won an Emmy and Art Directors Guild award. Employers in other professions desire Theatre Arts graduates for their team skills, their imaginative approach to problems, and their ability to communicate creatively.

Student Learning Outcomes

Students graduating with a B.A. in Theatre Arts from Cal State East Bay will be able to:

1. communicate in writing, orally, non-verbally, and visually in their area of emphasis.
2. conduct background research, evaluate scripts, and analyze performance for use in scholarly and performance applications.
3. employ historical, contemporary, and cultural performance techniques, as well as production technology appropriate to their area of emphasis.
4. reflect on performance techniques and concepts of other performers and apply high standards of reflection to their own production work.
5. solve problems of production by creating roles, dancing, designing, managing, building, directing, or choreographing performances that address issues of life in striking and remarkable ways.

Career Opportunities

- Actor/Actress
- Broadcast Technician
- Business Agent
- Choreographer
- College Student Services
- Comedian
- Corporate Officer
- Costume Designer
- Costume Technician
- Dancer
- Director
- Drama or Dance Teacher/Professor
- Dramaturg
- Lighting Technician
- Make-Up Artist/Specialist
- Non-profit Manager
- Performing Arts Fundraiser

- Playwright
- Producer
- Recreation Supervisor
- Sales Manager
- Set Decorator
- Set Designer
- Sound Technician
- Stage Manager
- Theatre Critic
- Theatre Technician
- Theatre Manager

Features

The Department of Theatre and Dance produces approximately 5-8 plays and dance concerts during the year. The selection of plays exposes students to design, acting, dance, singing, directing, stage management, and technical theatre suitable to a wide variety of styles, periods, and genres from Shakespeare to American Realism and from Greek Tragedy to Modern Drama.

The department has several ensemble groups, including Musical Theatre, Dance, Acting, Inclusive Interdisciplinary, and Design/Technology, that add to a varied and challenging performance schedule. Since 1990, sixteen department productions have toured to the Edinburgh Festival Fringe in Scotland and three other countries as part of the summer program.

The Theatre and Dance Department is fortunate to have excellent facilities including the 460 seat University Theatre, scene shop, costume shop, a sixteen-station design/drafting studio with a separate digital lab, two studio classrooms, green room, make-up room, dressing rooms with lockers and showers, and a spacious Dance Studio.

Major Requirements (B.A.)

The Theatre Arts major consists of 75-106 units, depending upon whether or not students choose an option. The Theatre Arts major without an option consists of 75 units. The B.A. degree requires a total of 180 units.

I. Beginning Electives (16 units)

Complete three show assignments (6 units) in the first two years as follows: three Production and Performance courses (THEA 1490 through THEA 1499 and THEA 2490 through 2499) as defined by the Subject Area Course List.

Complete ten units in ONE of the following areas of emphasis: Dance, Acting, or Technology and Design. Unless specified, courses should be numbered below 2999, and listed in the Subject Area Course List.

A. Dance (10 units)

Five Beginning or Intermediate dance technique courses (5) (Limited to Ballet, Hip Hop, Modern, Musical Theatre, or Jazz)

One course (2 units) from:

- THEA 2061 - Musical Theatre Show Choir A *Units: 2*
- THEA 2062 - Musical Theatre Show Choir B *Units: 2*
- THEA 2063 - Musical Theatre Show Choir C *Units: 2*

Three technology and design courses (3 units) from:

- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2424 - Fundamental Backstage Technology: Sound: Recording *Units: 1*

B. Acting (10 units)

- THEA 2031 - Stage Voice A *Units: 1*
- THEA 2032 - Stage Voice B *Units: 1*

One course (2 units) from:

- THEA 2061 - Musical Theatre Show Choir A *Units: 2*
- THEA 2062 - Musical Theatre Show Choir B *Units: 2*
- THEA 2063 - Musical Theatre Show Choir C *Units: 2*

At least three (3) units from:

- DANC 1191 - Beginning Technique Classes: Beginning Ballet Dance I *Units: 1*
- DANC 1192 - Beginning Technique Classes: Beginning Ballet Dance II *Units: 1*
- DANC 1193 - Beginning Technique Classes: Beginning Ballet Dance III *Units: 1*
- DANC 2120 - Musical Theatre Dance A *Units: 2*
- DANC 2121 - Musical Theatre Dance B *Units: 2*
- DANC 2122 - Musical Theatre Dance C *Units: 2*
- DANC 2123 - Musical Theatre Dance D *Units: 2*
- DANC 2124 - Musical Theatre Dance E *Units: 2*
- DANC 2125 - Musical Theatre Dance F *Units: 2*

Three technology and design courses (3 units) from:

- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2428 - Fundamental Backstage Technology: Sound: PA *Units: 1*

C. Technology and Design (10 units)

- THEA 1020 - Discover Acting *Units: 3*

Five technology and design courses (5 units) from:

- THEA 2421 - Fundamental Backstage Technology: Wood Scenery: Walls and Levels *Units: 1*
- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2424 - Fundamental Backstage Technology: Sound: Recording *Units: 1*
- THEA 2425 - Fundamental Backstage Technology: Stage Effects *Units: 1*
- THEA 2428 - Fundamental Backstage Technology: Sound: PA *Units: 1*
- THEA 2429 - Fundamental Backstage Technology: Practical Drafting and Model Building *Units: 1*
- THEA 2430 - Fundamental Backstage Technology: Practical Make-up *Units: 1*
- THEA 2431 Fundamental Backstage Technology

Two (2) units from:

- DANC 1191 - Beginning Technique Classes: Beginning Ballet Dance I *Units: 1*
- DANC 1192 - Beginning Technique Classes: Beginning Ballet Dance II *Units: 1*
- DANC 1193 - Beginning Technique Classes: Beginning Ballet Dance III *Units: 1*
- DANC 1141 - Beginning Technique Classes: Beginning Modern Dance I *Units: 1*
- DANC 1142 - Beginning Technique Classes: Beginning Modern Dance II *Units: 1*

- DANC 1143 - Beginning Technique Classes: Beginning Modern Dance III *Units: 1*

II. Common Core (30 units)

One lower division THEA or DANC course (see the Subject Area Course List (SACL) (4)

- DANC 3251 - Movement Analysis *Units: 4*
- DANC 3252 - Dance Through the Ages *Units: 4*
- THEA 3253 - Theatre Through the Ages *Units: 4*
- THEA 3254 - Scenery, Lights, and Sound Concepts *Units: 4*
- THEA 3255 - Costumes and Makeup Concepts *Units: 4*
- THEA 3256 - Directing: Text to Stage *Units: 3*
- THEA 3257 - Design for Stage *Units: 3*

III. Advanced Electives (19 units)

Theatre History and Literature Elective (4 units)

One additional course in Theatre History and Literature (or) Dance History. Students who intend to complete the Dance Option should take DANC 4201.

Advanced Technique Elective (6 units)

Two additional courses in advanced technique. Take courses numbered 3000 or above in ONE area of emphasis: Acting, Dance, or Technology and Design.

Production and Performance (9 units)

At least three Production and Performance courses, numbered 3000 and above, covering at least three show assignments during the final two years.

IV. Culmination and Assessment (10 units)

Each student must complete a Senior Culmination Project to include either a performance project in the Senior Festival, a written thesis, or a substantial internship. Students may substitute internship credit or thesis-related Independent Study credit for their Senior Festival courses.

- THEA 4151 - Senior Festival Preproduction *Units: 3*
- THEA 4152 - Senior Festival Performance *Units: 3*
- THEA 4155 - Career Management Issues in Theatre Arts *Units: 4*

Options (13-31 units)

An Option is not required. Options provide the opportunity to explore a specialized mode of theatre arts beyond the level of the basic emphasis required to graduate. Options allow sufficient depth of study to prepare for graduate school or entry-level work in a semi-professional company and involve additional work beyond the major requirements listed above. The department's graduates have found work in professional nonprofit companies after completing an internship as part of their CSUEB program. The additional work required for an option will prove useful in obtaining a quality internship or graduate school placement, so we recommend that students complete most of their option before seeking an internship. Acceptable courses are listed in the Subject Area Course List.

Acting Option (20 units)

Total major units with this option: 95.

- THEA 3056 - Intermediate Acting II *Units: 2*

- THEA 3057 - Intermediate Acting III *Units: 2*
- THEA 3064 - Audition Techniques and Talent Analysis I *Units: 1*
- THEA 3065 - Audition Techniques and Talent Analysis II *Units: 1*

Complete the B.A. Theatre Arts Beginning Electives for the Acting Emphasis

- THEA 2035 - Fundamentals of Acting *Units: 3*
- THEA 2037 - Acting 20th Century Drama and Diversity *Units: 3*
- THEA 2055 - Intermediate Acting I *Units: 2*

Complete two of the following courses (6):

- THEA 3052 - Acting for the Camera *Units: 4*
- THEA 4032 - Period Acting Style: Restoration and Moliere *Units: 3*
- THEA 4034 - Period Acting Style: Shakespeare *Units: 3*

Additional Emphasis and Performance requirements:

Take the following courses to meet B.A. Theatre Arts, Advanced Electives

- THEA 4038 - Acting Studio I *Units: 3*
- THEA 4039 - Acting Studio II *Units: 3*

Note:

Beginning in Year Two, Acting Option students must audition for and accept roles in at least two department productions per year. These six productions will be applied to the major, three to the Beginning Electives and three to Advanced Electives requirements.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Subject Area Course Lists (SACL)

Common Core-acceptable Lower Division Courses

Four-year CSUEB students should take any THEA or DANC course in a First Year General Education Cluster. Transfer students may petition the Chair to substitute a course with the following types of content: a theatre literature and history course with required reading of at least six plays, a performance appreciation course that required attendance and a review of at least four shows, a script analysis course, or a creative methods course (specifically any course that articulates with DANC 1200). Transfer students may also meet the requirement with one of the courses approved for four-year students. Substitutes require advanced approval of the Chair.

Acting

- THEA 2031 - Stage Voice A *Units: 1*
- THEA 2032 - Stage Voice B *Units: 1*
- THEA 2035 - Fundamentals of Acting *Units: 3*
- THEA 2037 - Acting 20th Century Drama and Diversity *Units: 3*

- THEA 2055 - Intermediate Acting I *Units: 2*
- THEA 2061 - Musical Theatre Show Choir A *Units: 2*
- THEA 2062 - Musical Theatre Show Choir B *Units: 2*
- THEA 2063 - Musical Theatre Show Choir C *Units: 2*
- THEA 3052 - Acting for the Camera *Units: 4*
- THEA 3056 - Intermediate Acting II *Units: 2*
- THEA 3057 - Intermediate Acting III *Units: 2*
- THEA 3064 - Audition Techniques and Talent Analysis I *Units: 1*
- THEA 3065 - Audition Techniques and Talent Analysis II *Units: 1*
- THEA 4032 - Period Acting Style: Restoration and Moliere *Units: 3*
- THEA 4034 - Period Acting Style: Shakespeare *Units: 3*
- THEA 4038 - Acting Studio I *Units: 3*
- THEA 4039 - Acting Studio II *Units: 3*

Dance

Fundamental Courses

- DANC 2020 - Rhythm and Music for Dance *Units: 2*
- DANC 2341 - Improvisation in Art and Life *Units: 2*
- DANC 2342 - Integrating Theatre and Dance *Units: 2*
- DANC 2343 - Body and Mind Training for Performance *Units: 2*
- DANC 2344 - Site Specific Performance *Units: 2*

Beginning Technique Courses

- DANC 1131 - Beginning Technique Classes: Beginning Hip Hop Dance I *Units: 1*
- DANC 1132 - Beginning Technique Classes: Beginning Hip Hop Dance II *Units: 1*
- DANC 1133 - Beginning Technique Classes: Beginning Hip Hop Dance III *Units: 1*
- DANC 1141 - Beginning Technique Classes: Beginning Modern Dance I *Units: 1*
- DANC 1142 - Beginning Technique Classes: Beginning Modern Dance II *Units: 1*
- DANC 1143 - Beginning Technique Classes: Beginning Modern Dance III *Units: 1*
- DANC 1171 - Beginning Technique Classes: Beginning Jazz Dance I *Units: 1*
- DANC 1172 - Beginning Technique Classes: Beginning Jazz Dance II *Units: 1*
- DANC 1173 - Beginning Technique Classes: Beginning Jazz Dance III *Units: 1*
- DANC 1191 - Beginning Technique Classes: Beginning Ballet Dance I *Units: 1*
- DANC 1192 - Beginning Technique Classes: Beginning Ballet Dance II *Units: 1*
- DANC 1193 - Beginning Technique Classes: Beginning Ballet Dance III *Units: 1*

Intermediate Technique Courses

- DANC 2131 - Intermediate Technique Classes: Intermediate Hip Hop Dance I *Units: 1*
- DANC 2132 - Intermediate Technique Classes: Intermediate Hip Hop Dance II *Units: 1*
- DANC 2133 - Intermediate Hip Hop Dance III
- DANC 2141 - Intermediate Technique Classes: Intermediate Modern Dance I *Units: 1*
- DANC 2171 - Intermediate Technique Classes: Intermediate Jazz Dance I *Units: 1*
- DANC 2172 - Intermediate Technique Classes: Intermediate Jazz Dance II *Units: 1*
- DANC 2173 - Intermediate Technique Classes: Intermediate Jazz Dance III *Units: 1*
- DANC 2191 - Intermediate Technique Classes: Intermediate Ballet Dance I *Units: 1*
- DANC 2192 - Intermediate Technique Classes: Intermediate Ballet Dance II *Units: 1*
- DANC 2193 - Intermediate Technique Classes: Intermediate Ballet Dance III *Units: 1*

Advanced Technique Courses

- DANC 4141 - Advanced Dance Technique Courses: Advanced Modern Dance I *Units: 2*
- DANC 4142 - Advanced Dance Technique Courses: Advanced Modern Dance II *Units: 2*
- DANC 4143 - Advanced Dance Technique Courses: Advanced Modern Dance III *Units: 2*
- DANC 4171 - Advanced Dance Technique Courses: Advanced Jazz Dance I *Units: 2*
- DANC 4172 - Advanced Dance Technique Courses: Advanced Jazz Dance II *Units: 2*
- DANC 4173 - Advanced Dance Technique Courses: Advanced Jazz Dance I *Units: 2*
- DANC 4191 - Advanced Dance Technique Courses: Advanced/Intermediate Ballet Dance I *Units: 2*
- DANC 4192 - Advanced Dance Technique Courses: Advanced/Intermediate Ballet Dance II *Units: 2*
- DANC 4193 - Advanced Dance Technique Courses: Advanced/Intermediate Ballet Dance III *Units: 2*

Dance History Course

- DANC 4201 - Dance in Modern Society *Units: 4*

Musical Theatre

- THEA 2044 - Fundamental Musical Theatre Techniques *Units: 3*
- THEA 2045 - Applied Singing for Musical Theatre A *Units: 1*
- THEA 2046 - Applied Singing for Musical Theatre B *Units: 1*
- THEA 2047 - Applied Singing for Musical Theatre C *Units: 1*
- THEA 2062 - Musical Theatre Show Choir B *Units: 2*
- THEA 2063 - Musical Theatre Show Choir C *Units: 2*
- THEA 3041 - Advanced Applied Singing for Musical Theatre I *Units: 1*
- THEA 3042 - Advanced Applied Singing for Musical Theatre II *Units: 1*
- THEA 3043 - Advanced Applied Singing for Musical Theatre III *Units: 1*
- THEA 3048 - Musical Theatre Technique I *Units: 3*
- THEA 3049 - Musical Theatre Technique II *Units: 3*
- THEA 3216 - History of Musical Theatre *Units: 4*
- THEA 4040 - Musical Theatre Journal Review *Units: 1*
- THEA 4048 - Advanced Musical Ensemble A *Units: 3*
- THEA 4049 - Advanced Musical Ensemble B *Units: 3*
- DANC 2121 - Musical Theatre Dance B *Units: 2*
- DANC 2122 - Musical Theatre Dance C *Units: 2*
- DANC 2123 - Musical Theatre Dance D *Units: 2*
- DANC 2124 - Musical Theatre Dance E *Units: 2*
- DANC 2125 - Musical Theatre Dance F *Units: 2*

Production and Performance

- THEA 1490 - Theatre Production Activity Courses: Costume or Backstage Activity A *Units: 2*
- THEA 2490 - Theatre Production Activity Courses: Costume or Backstage Activity B *Units: 2*
- THEA 3490 - Theatre Production Activity Courses: Costume or Backstage Activity C *Units: 2*
- THEA 4490 - Theatre Production Activity Courses: Costume or Backstage Activity D *Units: 2*
- THEA 1491 - Theatre Production Activity Courses: Musical Theatre Production A *Units: 4*
- THEA 2491 - Theatre Production Activity Courses: Musical Theatre Production B *Units: 4*
- THEA 3491 - Theatre Production Activity Courses: Musical Theatre Production C *Units: 4*
- THEA 4491 - Theatre Production Activity Courses: Musical Theatre Production D *Units: 4*
- THEA 1492 - Theatre Production Activity Courses: Stage Crew Activity A *Units: 2*
- THEA 2492 - Theatre Production Activity Courses: Stage Crew Activity B *Units: 2*
- THEA 3492 - Theatre Production Activity Courses: Stage Crew Activity C *Units: 2*

- THEA 4492 - Theatre Production Activity Courses: Stage Crew Activity D *Units: 2*
- THEA 1493 - Theatre Production Activity Courses: Production Staff Activity A *Units: 3*
- THEA 2493 - Theatre Production Activity Courses: Production Staff Activity B *Units: 3*
- THEA 3493 - Theatre Production Activity Courses: Production Staff Activity C *Units: 3*
- THEA 4493 - Theatre Production Activity Courses: Production Staff Activity D *Units: 3*
- THEA 1494 - Theatre Production Activity Courses: Festival Activity A *Units: 2*
- THEA 2494 - Theatre Production Activity Courses: Festival Activity B *Units: 2*
- THEA 3494 - Theatre Production Activity Courses: Festival Activity C *Units: 2*
- THEA 4494 - Theatre Production Activity Courses: Festival Activity D *Units: 2*
- THEA 1495 - Theatre Production Activity Courses: Studio Production Activity A *Units: 4*
- THEA 2495 - Theatre Production Activity Courses: Studio Production Activity B *Units: 4*
- THEA 3495 - Theatre Production Activity Courses: Studio Production Activity C *Units: 4*
- THEA 4495 - Theatre Production Activity Courses: Studio Production Activity D *Units: 4*
- THEA 1497 - Theatre Production Activity Courses: Special Workshop or Production A *Units: 1-12*
- THEA 2497 - Theatre Production Activity Courses: Special Workshop or Production B *Units: 1-12*
- THEA 3497 - Theatre Production Activity Courses: Special Workshop or Production C *Units: 1-12*
- THEA 4497 - Theatre Production Activity Courses: Special Workshop or Production D *Units: 1-12*
- THEA 1499 - Theatre Production Activity Courses: Production Practicum A *Units: 4*
- THEA 2499 - Theatre Production Activity Courses: Production Practicum B *Units: 4*
- THEA 3499 - Theatre Production Activity Courses: Production Practicum C *Units: 4*
- THEA 4499 - Theatre Production Activity Courses: Production Practicum D *Units: 4*

Technology and Design

Foundation Technique Courses

- THEA 2421 - Fundamental Backstage Technology: Wood Scenery: Walls and Levels *Units: 1*
- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2424 - Fundamental Backstage Technology: Sound: Recording *Units: 1*
- THEA 2425 - Fundamental Backstage Technology: Stage Effects *Units: 1*
- THEA 2428 - Fundamental Backstage Technology: Sound: PA *Units: 1*
- THEA 2430 - Fundamental Backstage Technology: Practical Make-up *Units: 1*
- THEA 2450 - Vectorworks CADD for Lights and Scenery *Units: 1*

Advanced Technique Courses

- THEA 3422 - History of Costume *Units: 4*
- THEA 3423 - Non-Western Costume *Units: 4*
- THEA 3424 - Scene Painting and Graphic Language *Units: 4*
- THEA 3426 - The Art of the Kimono *Units: 4*
- THEA 3427 - Fashion History *Units: 4*
- THEA 3428 - Fashion Design *Units: 4*
- THEA 4418 - Advanced Makeup and Maskmaking *Units: 2*

Theatre Arts, B.A.

Program Description

The Department of Theatre and Dance provides comprehensive pre-professional training in the areas of acting, directing, dance, design, theatre technology, and musical theatre. The primary goal of the program is to develop artists whose performance skills and creativity are supported by a

firm background in history, literature, and aesthetics. In an environment designed to encourage creativity and self-expression, each student has opportunities to participate in various specializations within the major-acting, costuming, dance, directing, scenery, lighting, sound, creative vision, or management. Students perform regularly in a variety of theatre and dance productions.

Theatre Arts graduates acquire a range of skills. This enables them to pursue different professional options. Many have entered advanced studies in nationally recognized universities and conservatories. Some have chosen careers in teaching, while others have gone directly into theatre or dance performance. Alumni perform on professional stages around the world, including Broadway and Hollywood. Some have been nominated for Tonys, Emmys, and Oscars; and, one designer won an Emmy and Art Directors Guild award. Employers in other professions desire Theatre Arts graduates for their team skills, their imaginative approach to problems, and their ability to communicate creatively.

Student Learning Outcomes

Students graduating with a B.A. in Theatre Arts from Cal State East Bay will be able to:

1. communicate in writing, orally, non-verbally, and visually in their area of emphasis.
2. conduct background research, evaluate scripts, and analyze performance for use in scholarly and performance applications.
3. employ historical, contemporary, and cultural performance techniques, as well as production technology appropriate to their area of emphasis.
4. reflect on performance techniques and concepts of other performers and apply high standards of reflection to their own production work.
5. solve problems of production by creating roles, dancing, designing, managing, building, directing, or choreographing performances that address issues of life in striking and remarkable ways.

Career Opportunities

- Actor/Actress
- Broadcast Technician
- Business Agent
- Choreographer
- College Student Services
- Comedian
- Corporate Officer
- Costume Designer
- Costume Technician
- Dancer
- Director
- Drama or Dance Teacher/Professor
- Dramaturg
- Lighting Technician
- Make-Up Artist/Specialist
- Non-profit Manager
- Performing Arts Fundraiser
- Playwright
- Producer
- Recreation Supervisor
- Sales Manager
- Set Decorator
- Set Designer
- Sound Technician
- Stage Manager
- Theatre Critic
- Theatre Technician
- Theatre Manager

Features

The Department of Theatre and Dance produces approximately 5-8 plays and dance concerts during the year. The selection of plays exposes students to design, acting, dance, singing, directing, stage management, and technical theatre suitable to a wide variety of styles, periods, and genres from Shakespeare to American Realism and from Greek Tragedy to Modern Drama.

The department has several ensemble groups, including Musical Theatre, Dance, Acting, Inclusive Interdisciplinary, and Design/Technology, that add to a varied and challenging performance schedule. Since 1990, sixteen department productions have toured to the Edinburgh Festival Fringe in Scotland and three other countries as part of the summer program.

The Theatre and Dance Department is fortunate to have excellent facilities including the 460 seat University Theatre, scene shop, costume shop, a sixteen-station design/drafting studio with a separate digital lab, two studio classrooms, green room, make-up room, dressing rooms with lockers and showers, and a spacious Dance Studio.

Major Requirements (B.A.)

The Theatre Arts major consists of 75-106 units, depending upon whether or not students choose an option. The Theatre Arts major without an option consists of 75 units. The B.A. degree requires a total of 180 units.

I. Beginning Electives (16 units)

Complete three show assignments (6 units) in the first two years as follows: three Production and Performance courses (THEA 1490 through THEA 1499 and THEA 2490 through 2499) as defined by the Subject Area Course List.

Complete ten units in ONE of the following areas of emphasis: Dance, Acting, or Technology and Design. Unless specified, courses should be numbered below 2999, and listed in the Subject Area Course List.

A. Dance (10 units)

Five Beginning or Intermediate dance technique courses (5) (Limited to Ballet, Hip Hop, Modern, Musical Theatre, or Jazz)

One course (2 units) from:

- THEA 2061 - Musical Theatre Show Choir A *Units: 2*
- THEA 2062 - Musical Theatre Show Choir B *Units: 2*
- THEA 2063 - Musical Theatre Show Choir C *Units: 2*

Three technology and design courses (3 units) from:

- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2424 - Fundamental Backstage Technology: Sound: Recording *Units: 1*

B. Acting (10 units)

- THEA 2031 - Stage Voice A *Units: 1*
- THEA 2032 - Stage Voice B *Units: 1*

One course (2 units) from:

- THEA 2061 - Musical Theatre Show Choir A *Units: 2*
- THEA 2062 - Musical Theatre Show Choir B *Units: 2*
- THEA 2063 - Musical Theatre Show Choir C *Units: 2*

At least three (3) units from:

- DANC 1191 - Beginning Technique Classes: Beginning Ballet Dance I *Units: 1*
- DANC 1192 - Beginning Technique Classes: Beginning Ballet Dance II *Units: 1*
- DANC 1193 - Beginning Technique Classes: Beginning Ballet Dance III *Units: 1*
- DANC 2120 - Musical Theatre Dance A *Units: 2*
- DANC 2121 - Musical Theatre Dance B *Units: 2*
- DANC 2122 - Musical Theatre Dance C *Units: 2*
- DANC 2123 - Musical Theatre Dance D *Units: 2*
- DANC 2124 - Musical Theatre Dance E *Units: 2*
- DANC 2125 - Musical Theatre Dance F *Units: 2*

Three technology and design courses (3 units) from:

- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2428 - Fundamental Backstage Technology: Sound: PA *Units: 1*

C. Technology and Design (10 units)

- THEA 1020 - Discover Acting *Units: 3*

Five technology and design courses (5 units) from:

- THEA 2421 - Fundamental Backstage Technology: Wood Scenery: Walls and Levels *Units: 1*
- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2424 - Fundamental Backstage Technology: Sound: Recording *Units: 1*
- THEA 2425 - Fundamental Backstage Technology: Stage Effects *Units: 1*
- THEA 2428 - Fundamental Backstage Technology: Sound: PA *Units: 1*
- THEA 2429 - Fundamental Backstage Technology: Practical Drafting and Model Building *Units: 1*
- THEA 2430 - Fundamental Backstage Technology: Practical Make-up *Units: 1*
- THEA 2431 Fundamental Backstage Technology

Two (2) units from:

- DANC 1191 - Beginning Technique Classes: Beginning Ballet Dance I *Units: 1*
- DANC 1192 - Beginning Technique Classes: Beginning Ballet Dance II *Units: 1*
- DANC 1193 - Beginning Technique Classes: Beginning Ballet Dance III *Units: 1*
- DANC 1141 - Beginning Technique Classes: Beginning Modern Dance I *Units: 1*
- DANC 1142 - Beginning Technique Classes: Beginning Modern Dance II *Units: 1*
- DANC 1143 - Beginning Technique Classes: Beginning Modern Dance III *Units: 1*

II. Common Core (30 units)

One lower division THEA or DANC course (see the Subject Area Course List (SACL) (4)

- DANC 3251 - Movement Analysis *Units: 4*
- DANC 3252 - Dance Through the Ages *Units: 4*
- THEA 3253 - Theatre Through the Ages *Units: 4*
- THEA 3254 - Scenery, Lights, and Sound Concepts *Units: 4*
- THEA 3255 - Costumes and Makeup Concepts *Units: 4*
- THEA 3256 - Directing: Text to Stage *Units: 3*
- THEA 3257 - Design for Stage *Units: 3*

III. Advanced Electives (19 units)

Theatre History and Literature Elective (4 units)

One additional course in Theatre History and Literature (or) Dance History. Students who intend to complete the Dance Option should take DANC 4201.

Advanced Technique Elective (6 units)

Two additional courses in advanced technique. Take courses numbered 3000 or above in ONE area of emphasis: Acting, Dance, or Technology and Design.

Production and Performance (9 units)

At least three Production and Performance courses, numbered 3000 and above, covering at least three show assignments during the final two years.

IV. Culmination and Assessment (10 units)

Each student must complete a Senior Culmination Project to include either a performance project in the Senior Festival, a written thesis, or a substantial internship. Students may substitute internship credit or thesis-related Independent Study credit for their Senior Festival courses.

- THEA 4151 - Senior Festival Preproduction *Units: 3*
- THEA 4152 - Senior Festival Performance *Units: 3*
- THEA 4155 - Career Management Issues in Theatre Arts *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Subject Area Course Lists (SACL)

Common Core-acceptable Lower Division Courses

Four-year CSUEB students should take any THEA or DANC course in a First Year General Education Cluster. Transfer students may petition the Chair to substitute a course with the following types of content: a theatre literature and history course with required reading of at least six plays, a performance appreciation course that required attendance and a review of at least four shows, a script analysis course, or a creative methods course (specifically any course that articulates with DANC 1200). Transfer students may also meet the requirement with one of the courses approved for four-year students. Substitutes require advanced approval of the Chair.

Acting

- THEA 2031 - Stage Voice A *Units: 1*
- THEA 2032 - Stage Voice B *Units: 1*
- THEA 2035 - Fundamentals of Acting *Units: 3*
- THEA 2037 - Acting 20th Century Drama and Diversity *Units: 3*
- THEA 2055 - Intermediate Acting I *Units: 2*
- THEA 2061 - Musical Theatre Show Choir A *Units: 2*
- THEA 2062 - Musical Theatre Show Choir B *Units: 2*
- THEA 2063 - Musical Theatre Show Choir C *Units: 2*

- THEA 3052 - Acting for the Camera *Units: 4*
- THEA 3056 - Intermediate Acting II *Units: 2*
- THEA 3057 - Intermediate Acting III *Units: 2*
- THEA 3064 - Audition Techniques and Talent Analysis I *Units: 1*
- THEA 3065 - Audition Techniques and Talent Analysis II *Units: 1*
- THEA 4032 - Period Acting Style: Restoration and Moliere *Units: 3*
- THEA 4034 - Period Acting Style: Shakespeare *Units: 3*
- THEA 4038 - Acting Studio I *Units: 3*
- THEA 4039 - Acting Studio II *Units: 3*

Dance

Fundamental Courses

- DANC 2020 - Rhythm and Music for Dance *Units: 2*
- DANC 2341 - Improvisation in Art and Life *Units: 2*
- DANC 2342 - Integrating Theatre and Dance *Units: 2*
- DANC 2343 - Body and Mind Training for Performance *Units: 2*
- DANC 2344 - Site Specific Performance *Units: 2*

Beginning Technique Courses

- DANC 1131 - Beginning Technique Classes: Beginning Hip Hop Dance I *Units: 1*
- DANC 1132 - Beginning Technique Classes: Beginning Hip Hop Dance II *Units: 1*
- DANC 1133 - Beginning Technique Classes: Beginning Hip Hop Dance III *Units: 1*
- DANC 1141 - Beginning Technique Classes: Beginning Modern Dance I *Units: 1*
- DANC 1142 - Beginning Technique Classes: Beginning Modern Dance II *Units: 1*
- DANC 1143 - Beginning Technique Classes: Beginning Modern Dance III *Units: 1*
- DANC 1171 - Beginning Technique Classes: Beginning Jazz Dance I *Units: 1*
- DANC 1172 - Beginning Technique Classes: Beginning Jazz Dance II *Units: 1*
- DANC 1173 - Beginning Technique Classes: Beginning Jazz Dance III *Units: 1*
- DANC 1191 - Beginning Technique Classes: Beginning Ballet Dance I *Units: 1*
- DANC 1192 - Beginning Technique Classes: Beginning Ballet Dance II *Units: 1*
- DANC 1193 - Beginning Technique Classes: Beginning Ballet Dance III *Units: 1*

Intermediate Technique Courses

- DANC 2131 - Intermediate Technique Classes: Intermediate Hip Hop Dance I *Units: 1*
- DANC 2132 - Intermediate Technique Classes: Intermediate Hip Hop Dance II *Units: 1*
- DANC 2133 - Intermediate Hip Hop Dance III
- DANC 2141 - Intermediate Technique Classes: Intermediate Modern Dance I *Units: 1*
- DANC 2171 - Intermediate Technique Classes: Intermediate Jazz Dance I *Units: 1*
- DANC 2172 - Intermediate Technique Classes: Intermediate Jazz Dance II *Units: 1*
- DANC 2173 - Intermediate Technique Classes: Intermediate Jazz Dance III *Units: 1*
- DANC 2191 - Intermediate Technique Classes: Intermediate Ballet Dance I *Units: 1*
- DANC 2192 - Intermediate Technique Classes: Intermediate Ballet Dance II *Units: 1*
- DANC 2193 - Intermediate Technique Classes: Intermediate Ballet Dance III *Units: 1*

Advanced Technique Courses

- DANC 4141 - Advanced Dance Technique Courses: Advanced Modern Dance I *Units: 2*

- DANC 4142 - Advanced Dance Technique Courses: Advanced Modern Dance II *Units: 2*
- DANC 4143 - Advanced Dance Technique Courses: Advanced Modern Dance III *Units: 2*
- DANC 4171 - Advanced Dance Technique Courses: Advanced Jazz Dance I *Units: 2*
- DANC 4172 - Advanced Dance Technique Courses: Advanced Jazz Dance II *Units: 2*
- DANC 4173 - Advanced Dance Technique Courses: Advanced Jazz Dance I *Units: 2*
- DANC 4191 - Advanced Dance Technique Courses: Advanced/Intermediate Ballet Dance I *Units: 2*
- DANC 4192 - Advanced Dance Technique Courses: Advanced/Intermediate Ballet Dance II *Units: 2*
- DANC 4193 - Advanced Dance Technique Courses: Advanced/Intermediate Ballet Dance III *Units: 2*

Dance History Course

- DANC 4201 - Dance in Modern Society *Units: 4*

Musical Theatre

- THEA 2044 - Fundamental Musical Theatre Techniques *Units: 3*
- THEA 2045 - Applied Singing for Musical Theatre A *Units: 1*
- THEA 2046 - Applied Singing for Musical Theatre B *Units: 1*
- THEA 2047 - Applied Singing for Musical Theatre C *Units: 1*
- THEA 2062 - Musical Theatre Show Choir B *Units: 2*
- THEA 2063 - Musical Theatre Show Choir C *Units: 2*
- THEA 3041 - Advanced Applied Singing for Musical Theatre I *Units: 1*
- THEA 3042 - Advanced Applied Singing for Musical Theatre II *Units: 1*
- THEA 3043 - Advanced Applied Singing for Musical Theatre III *Units: 1*
- THEA 3048 - Musical Theatre Technique I *Units: 3*
- THEA 3049 - Musical Theatre Technique II *Units: 3*
- THEA 3216 - History of Musical Theatre *Units: 4*
- THEA 4040 - Musical Theatre Journal Review *Units: 1*
- THEA 4048 - Advanced Musical Ensemble A *Units: 3*
- THEA 4049 - Advanced Musical Ensemble B *Units: 3*
- DANC 2121 - Musical Theatre Dance B *Units: 2*
- DANC 2122 - Musical Theatre Dance C *Units: 2*
- DANC 2123 - Musical Theatre Dance D *Units: 2*
- DANC 2124 - Musical Theatre Dance E *Units: 2*
- DANC 2125 - Musical Theatre Dance F *Units: 2*

Production and Performance

- THEA 1490 - Theatre Production Activity Courses: Costume or Backstage Activity A *Units: 2*
- THEA 2490 - Theatre Production Activity Courses: Costume or Backstage Activity B *Units: 2*
- THEA 3490 - Theatre Production Activity Courses: Costume or Backstage Activity C *Units: 2*
- THEA 4490 - Theatre Production Activity Courses: Costume or Backstage Activity D *Units: 2*
- THEA 1491 - Theatre Production Activity Courses: Musical Theatre Production A *Units: 4*
- THEA 2491 - Theatre Production Activity Courses: Musical Theatre Production B *Units: 4*
- THEA 3491 - Theatre Production Activity Courses: Musical Theatre Production C *Units: 4*
- THEA 4491 - Theatre Production Activity Courses: Musical Theatre Production D *Units: 4*
- THEA 1492 - Theatre Production Activity Courses: Stage Crew Activity A *Units: 2*
- THEA 2492 - Theatre Production Activity Courses: Stage Crew Activity B *Units: 2*
- THEA 3492 - Theatre Production Activity Courses: Stage Crew Activity C *Units: 2*
- THEA 4492 - Theatre Production Activity Courses: Stage Crew Activity D *Units: 2*
- THEA 1493 - Theatre Production Activity Courses: Production Staff Activity A *Units: 3*
- THEA 2493 - Theatre Production Activity Courses: Production Staff Activity B *Units: 3*

- THEA 3493 - Theatre Production Activity Courses: Production Staff Activity C *Units: 3*
- THEA 4493 - Theatre Production Activity Courses: Production Staff Activity D *Units: 3*
- THEA 1494 - Theatre Production Activity Courses: Festival Activity A *Units: 2*
- THEA 2494 - Theatre Production Activity Courses: Festival Activity B *Units: 2*
- THEA 3494 - Theatre Production Activity Courses: Festival Activity C *Units: 2*
- THEA 4494 - Theatre Production Activity Courses: Festival Activity D *Units: 2*
- THEA 1495 - Theatre Production Activity Courses: Studio Production Activity A *Units: 4*
- THEA 2495 - Theatre Production Activity Courses: Studio Production Activity B *Units: 4*
- THEA 3495 - Theatre Production Activity Courses: Studio Production Activity C *Units: 4*
- THEA 4495 - Theatre Production Activity Courses: Studio Production Activity D *Units: 4*
- THEA 1497 - Theatre Production Activity Courses: Special Workshop or Production A *Units: 1-12*
- THEA 2497 - Theatre Production Activity Courses: Special Workshop or Production B *Units: 1-12*
- THEA 3497 - Theatre Production Activity Courses: Special Workshop or Production C *Units: 1-12*
- THEA 4497 - Theatre Production Activity Courses: Special Workshop or Production D *Units: 1-12*
- THEA 1499 - Theatre Production Activity Courses: Production Practicum A *Units: 4*
- THEA 2499 - Theatre Production Activity Courses: Production Practicum B *Units: 4*
- THEA 3499 - Theatre Production Activity Courses: Production Practicum C *Units: 4*
- THEA 4499 - Theatre Production Activity Courses: Production Practicum D *Units: 4*

Technology and Design

Foundation Technique Courses

- THEA 2421 - Fundamental Backstage Technology: Wood Scenery: Walls and Levels *Units: 1*
- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2424 - Fundamental Backstage Technology: Sound: Recording *Units: 1*
- THEA 2425 - Fundamental Backstage Technology: Stage Effects *Units: 1*
- THEA 2428 - Fundamental Backstage Technology: Sound: PA *Units: 1*
- THEA 2430 - Fundamental Backstage Technology: Practical Make-up *Units: 1*
- THEA 2450 - Vectorworks CADD for Lights and Scenery *Units: 1*

Advanced Technique Courses

- THEA 3422 - History of Costume *Units: 4*
- THEA 3423 - Non-Western Costume *Units: 4*
- THEA 3424 - Scene Painting and Graphic Language *Units: 4*
- THEA 3426 - The Art of the Kimono *Units: 4*
- THEA 3427 - Fashion History *Units: 4*
- THEA 3428 - Fashion Design *Units: 4*
- THEA 4418 - Advanced Makeup and Maskmaking *Units: 2*

Theatre Arts, Dance Option, B.A.

Program Description

The Department of Theatre and Dance provides comprehensive pre-professional training in the areas of acting, directing, dance, design, theatre technology, and musical theatre. The primary goal of the program is to develop artists whose performance skills and creativity are supported by a firm background in history, literature, and aesthetics. In an environment designed to encourage creativity and self-expression, each student has opportunities to participate in various specializations within the major—acting, costuming, dance, directing, scenery, lighting, sound, creative vision, or management. Students perform regularly in a variety of theatre and dance productions.

Theatre Arts graduates acquire a range of skills. This enables them to pursue different professional options. Many have entered advanced studies in nationally recognized universities and conservatories. Some have chosen careers in teaching, while others have gone directly into theatre or dance performance. Alumni perform on professional stages around the world, including Broadway and Hollywood. Some have been nominated for Tonys, Emmys, and Oscars; and, one designer won an Emmy and Art Directors Guild award. Employers in other professions desire Theatre Arts graduates for their team skills, their imaginative approach to problems, and their ability to communicate creatively.

Student Learning Outcomes

Students graduating with a B.A. in Theatre Arts from Cal State East Bay will be able to:

1. communicate in writing, orally, non-verbally, and visually in their area of emphasis.
2. conduct background research, evaluate scripts, and analyze performance for use in scholarly and performance applications.
3. employ historical, contemporary, and cultural performance techniques, as well as production technology appropriate to their area of emphasis.
4. reflect on performance techniques and concepts of other performers and apply high standards of reflection to their own production work.
5. solve problems of production by creating roles, dancing, designing, managing, building, directing, or choreographing performances that address issues of life in striking and remarkable ways.

Career Opportunities

- Actor/Actress
- Broadcast Technician
- Business Agent
- Choreographer
- College Student Services
- Comedian
- Corporate Officer
- Costume Designer
- Costume Technician
- Dancer
- Director
- Drama or Dance Teacher/Professor
- Dramaturg
- Lighting Technician
- Make-Up Artist/Specialist
- Non-profit Manager
- Performing Arts Fundraiser
- Playwright
- Producer
- Recreation Supervisor
- Sales Manager
- Set Decorator
- Set Designer
- Sound Technician
- Stage Manager
- Theatre Critic
- Theatre Technician
- Theatre Manager

Features

The Department of Theatre and Dance produces approximately 5-8 plays and dance concerts during the year. The selection of plays exposes students to design, acting, dance, singing, directing, stage management, and technical theatre suitable to a wide variety of styles, periods, and genres from Shakespeare to American Realism and from Greek Tragedy to Modern Drama.

The department has several ensemble groups, including Musical Theatre, Dance, Acting, Inclusive Interdisciplinary, and Design/Technology, that add to a varied and challenging performance schedule. Since 1990, sixteen department productions have toured to the Edinburgh Festival Fringe in Scotland and three other countries as part of the summer program.

The Theatre and Dance Department is fortunate to have excellent facilities including the 460 seat University Theatre, scene shop, costume shop, a sixteen-station design/drafting studio with a separate digital lab, two studio classrooms, green room, make-up room, dressing rooms with lockers and showers, and a spacious Dance Studio.

Major Requirements (B.A.)

The Theatre Arts major consists of 75-106 units, depending upon whether or not students choose an option. The Theatre Arts major without an option consists of 75 units. The B.A. degree requires a total of 180 units.

I. Beginning Electives (16 units)

Complete three show assignments (6 units) in the first two years as follows: three Production and Performance courses (THEA 1490 through THEA 1499 and THEA 2490 through 2499) as defined by the Subject Area Course List.

Complete ten units in ONE of the following areas of emphasis: Dance, Acting, or Technology and Design. Unless specified, courses should be numbered below 2999, and listed in the Subject Area Course List.

A. Dance (10 units)

Five Beginning or Intermediate dance technique courses (5) (Limited to Ballet, Hip Hop, Modern, Musical Theatre, or Jazz)

One course (2 units) from:

- THEA 2061 - Musical Theatre Show Choir A *Units: 2*
- THEA 2062 - Musical Theatre Show Choir B *Units: 2*
- THEA 2063 - Musical Theatre Show Choir C *Units: 2*

Three technology and design courses (3 units) from:

- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2424 - Fundamental Backstage Technology: Sound: Recording *Units: 1*

B. Acting (10 units)

- THEA 2031 - Stage Voice A *Units: 1*
- THEA 2032 - Stage Voice B *Units: 1*

One course (2 units) from:

- THEA 2061 - Musical Theatre Show Choir A *Units: 2*
- THEA 2062 - Musical Theatre Show Choir B *Units: 2*
- THEA 2063 - Musical Theatre Show Choir C *Units: 2*

At least three (3) units from:

- DANC 1191 - Beginning Technique Classes: Beginning Ballet Dance I *Units: 1*
- DANC 1192 - Beginning Technique Classes: Beginning Ballet Dance II *Units: 1*
- DANC 1193 - Beginning Technique Classes: Beginning Ballet Dance III *Units: 1*

- DANC 2120 - Musical Theatre Dance A *Units: 2*
- DANC 2121 - Musical Theatre Dance B *Units: 2*
- DANC 2122 - Musical Theatre Dance C *Units: 2*
- DANC 2123 - Musical Theatre Dance D *Units: 2*
- DANC 2124 - Musical Theatre Dance E *Units: 2*
- DANC 2125 - Musical Theatre Dance F *Units: 2*

Three technology and design courses (3 units) from:

- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2428 - Fundamental Backstage Technology: Sound: PA *Units: 1*

C. Technology and Design (10 units)

- THEA 1020 - Discover Acting *Units: 3*

Five technology and design courses (5 units) from:

- THEA 2421 - Fundamental Backstage Technology: Wood Scenery: Walls and Levels *Units: 1*
- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2424 - Fundamental Backstage Technology: Sound: Recording *Units: 1*
- THEA 2425 - Fundamental Backstage Technology: Stage Effects *Units: 1*
- THEA 2428 - Fundamental Backstage Technology: Sound: PA *Units: 1*
- THEA 2429 - Fundamental Backstage Technology: Practical Drafting and Model Building *Units: 1*
- THEA 2430 - Fundamental Backstage Technology: Practical Make-up *Units: 1*
- THEA 2431 Fundamental Backstage Technology

Two (2) units from:

- DANC 1191 - Beginning Technique Classes: Beginning Ballet Dance I *Units: 1*
- DANC 1192 - Beginning Technique Classes: Beginning Ballet Dance II *Units: 1*
- DANC 1193 - Beginning Technique Classes: Beginning Ballet Dance III *Units: 1*
- DANC 1141 - Beginning Technique Classes: Beginning Modern Dance I *Units: 1*
- DANC 1142 - Beginning Technique Classes: Beginning Modern Dance II *Units: 1*
- DANC 1143 - Beginning Technique Classes: Beginning Modern Dance III *Units: 1*

II. Common Core (30 units)

One lower division THEA or DANC course (see the Subject Area Course List (SACL) (4)

- DANC 3251 - Movement Analysis *Units: 4*
- DANC 3252 - Dance Through the Ages *Units: 4*
- THEA 3253 - Theatre Through the Ages *Units: 4*
- THEA 3254 - Scenery, Lights, and Sound Concepts *Units: 4*
- THEA 3255 - Costumes and Makeup Concepts *Units: 4*
- THEA 3256 - Directing: Text to Stage *Units: 3*
- THEA 3257 - Design for Stage *Units: 3*

III. Advanced Electives (19 units)

Theatre History and Literature Elective (4 units)

One additional course in Theatre History and Literature (or) Dance History. Students who intend to complete the Dance Option should take DANC 4201.

Advanced Technique Elective (6 units)

Two additional courses in advanced technique. Take courses numbered 3000 or above in ONE area of emphasis: Acting, Dance, or Technology and Design.

Production and Performance (9 units)

At least three Production and Performance courses, numbered 3000 and above, covering at least three show assignments during the final two years.

IV. Culmination and Assessment (10 units)

Each student must complete a Senior Culmination Project to include either a performance project in the Senior Festival, a written thesis, or a substantial internship. Students may substitute internship credit or thesis-related Independent Study credit for their Senior Festival courses.

- THEA 4151 - Senior Festival Preproduction *Units: 3*
- THEA 4152 - Senior Festival Performance *Units: 3*
- THEA 4155 - Career Management Issues in Theatre Arts *Units: 4*

Options (13-31 units)

An Option is not required. Options provide the opportunity to explore a specialized mode of theatre arts beyond the level of the basic emphasis required to graduate. Options allow sufficient depth of study to prepare for graduate school or entry-level work in a semi-professional company and involve additional work beyond the major requirements listed above. The department's graduates have found work in professional nonprofit companies after completing an internship as part of their CSUEB program. The additional work required for an option will prove useful in obtaining a quality internship or graduate school placement, so we recommend that students complete most of their option before seeking an internship. Acceptable courses are listed in the Subject Area Course List.

Dance Option (15-30 units)

Total major units with this option: 90-105.

Complete the B.A. Theatre Arts Beginning Electives for:

the Dance Emphasis. Dance Option students may apply only Ballet, Hip Hop, Modern, Musical Theatre, and Jazz courses at the beginning level.

Complete three of the following courses: (6)

- DANC 2020 - Rhythm and Music for Dance *Units: 2*
- DANC 2341 - Improvisation in Art and Life *Units: 2*
- DANC 2342 - Integrating Theatre and Dance *Units: 2*
- DANC 2343 - Body and Mind Training for Performance *Units: 2*
- DANC 2344 - Site Specific Performance *Units: 2*

If necessary,

students should take additional technique courses from the SAEL at the beginning and intermediate levels to qualify for the following third/fourth year advanced technique courses.

Dance majors must take advanced technique courses from:

the following list every quarter of the third and fourth year. Complete a minimum of six courses in at least three styles. Students in these courses must pass a placement audition in the first class meeting. (6-12)

- DANC 3101 - Dance Ensemble Technique A *Units: 1*
- DANC 3102 - Dance Ensemble Technique B *Units: 1*
- DANC 3103 - Dance Ensemble Technique C *Units: 1*
- DANC 3104 - Dance Ensemble Technique D *Units: 1*
- DANC 3105 - Dance Ensemble Technique E *Units: 1*
- DANC 3106 - Dance Ensemble Technique F *Units: 1*
- DANC 4131 - Advanced Dance Technique Courses: Advanced Hip Hop Dance I *Units: 2*
- DANC 4132 - Advanced Dance Technique Courses: Advanced Hip Hop Dance II *Units: 2*
- DANC 4133 - Advanced Dance Technique Courses: Advanced Hip Hop Dance III *Units: 2*
- DANC 4135 - Advanced Dance Technique Courses: Advanced Breakdance I *Units: 2*
- DANC 4136 - Advanced Dance Technique Courses: Advanced Breakdance II *Units: 2*
- DANC 4137 - Advanced Dance Technique Courses: Advanced Breakdance III *Units: 2*
- DANC 4141 - Advanced Dance Technique Courses: Advanced Modern Dance I *Units: 2*
- DANC 4142 - Advanced Dance Technique Courses: Advanced Modern Dance II *Units: 2*
- DANC 4143 - Advanced Dance Technique Courses: Advanced Modern Dance III *Units: 2*
- DANC 4171 - Advanced Dance Technique Courses: Advanced Jazz Dance I *Units: 2*
- DANC 4172 - Advanced Dance Technique Courses: Advanced Jazz Dance II *Units: 2*
- DANC 4173 - Advanced Dance Technique Courses: Advanced Jazz Dance I *Units: 2*
- DANC 4191 - Advanced Dance Technique Courses: Advanced/Intermediate Ballet Dance I *Units: 2*
- DANC 4192 - Advanced Dance Technique Courses: Advanced/Intermediate Ballet Dance II *Units: 2*
- DANC 4193 - Advanced Dance Technique Courses: Advanced/Intermediate Ballet Dance III *Units: 2*

Complete two of the following:

advanced ensemble courses to apply to the B.A. Theatre Arts Advanced Electives and 1-4 additional courses to the Option by agreement with advisor. (3-12)

- DANC 3451 - Dance Ensemble A *Units: 3*
- DANC 3452 - Dance Ensemble B *Units: 3*
- DANC 3453 - Dance Ensemble C *Units: 3*
- DANC 3454 - Dance Ensemble D *Units: 3*
- DANC 3455 - Dance Ensemble E *Units: 3*
- DANC 3456 - Dance Ensemble F *Units: 3*

Other requirements:

Majors must participate in three productions for credit in the last two years to complete the Advanced Electives. Dance Option students should take the following course to meet the Advanced Elective requirement for an additional Dance History course.

- DANC 4201 - Dance in Modern Society *Units: 4*

Endorsements

Students may fulfill assignments, projects, performances, internships and service learning experiences to enhance preparation for specific careers in dance such as choreography, teaching, or performance. Students who have completed a prearranged plan will qualify for an endorsement upon graduation. Endorsement plans should be arranged in Year Three with the major advisor, dance faculty, and Chair. An endorsement plan might involve alternative assignments or additional requirements. Taking the courses in their plan qualifies a student for consideration. The dance faculty will make endorsements for superior achievement. Achievement goals should be spelled out in the plan. Endorsements will not appear on the

transcript or diploma, but will be kept on file by the department. Students may plan for one or more of the following endorsements: 1) Choreography Endorsement; 2) Technique & Performance Endorsement; 3) Teaching Endorsement.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Subject Area Course Lists (SACL)

Common Core-acceptable Lower Division Courses

Four-year CSUEB students should take any THEA or DANC course in a First Year General Education Cluster. Transfer students may petition the Chair to substitute a course with the following types of content: a theatre literature and history course with required reading of at least six plays, a performance appreciation course that required attendance and a review of at least four shows, a script analysis course, or a creative methods course (specifically any course that articulates with DANC 1200). Transfer students may also meet the requirement with one of the courses approved for four-year students. Substitutes require advanced approval of the Chair.

Acting

- THEA 2031 - Stage Voice A *Units: 1*
- THEA 2032 - Stage Voice B *Units: 1*
- THEA 2035 - Fundamentals of Acting *Units: 3*
- THEA 2037 - Acting 20th Century Drama and Diversity *Units: 3*
- THEA 2055 - Intermediate Acting I *Units: 2*
- THEA 2061 - Musical Theatre Show Choir A *Units: 2*
- THEA 2062 - Musical Theatre Show Choir B *Units: 2*
- THEA 2063 - Musical Theatre Show Choir C *Units: 2*
- THEA 3052 - Acting for the Camera *Units: 4*
- THEA 3056 - Intermediate Acting II *Units: 2*
- THEA 3057 - Intermediate Acting III *Units: 2*
- THEA 3064 - Audition Techniques and Talent Analysis I *Units: 1*
- THEA 3065 - Audition Techniques and Talent Analysis II *Units: 1*
- THEA 4032 - Period Acting Style: Restoration and Moliere *Units: 3*
- THEA 4034 - Period Acting Style: Shakespeare *Units: 3*
- THEA 4038 - Acting Studio I *Units: 3*
- THEA 4039 - Acting Studio II *Units: 3*

Dance

Fundamental Courses

- DANC 2020 - Rhythm and Music for Dance *Units: 2*
- DANC 2341 - Improvisation in Art and Life *Units: 2*
- DANC 2342 - Integrating Theatre and Dance *Units: 2*
- DANC 2343 - Body and Mind Training for Performance *Units: 2*
- DANC 2344 - Site Specific Performance *Units: 2*

Beginning Technique Courses

- DANC 1131 - Beginning Technique Classes: Beginning Hip Hop Dance I *Units: 1*
- DANC 1132 - Beginning Technique Classes: Beginning Hip Hop Dance II *Units: 1*
- DANC 1133 - Beginning Technique Classes: Beginning Hip Hop Dance III *Units: 1*
- DANC 1141 - Beginning Technique Classes: Beginning Modern Dance I *Units: 1*
- DANC 1142 - Beginning Technique Classes: Beginning Modern Dance II *Units: 1*
- DANC 1143 - Beginning Technique Classes: Beginning Modern Dance III *Units: 1*
- DANC 1171 - Beginning Technique Classes: Beginning Jazz Dance I *Units: 1*
- DANC 1172 - Beginning Technique Classes: Beginning Jazz Dance II *Units: 1*
- DANC 1173 - Beginning Technique Classes: Beginning Jazz Dance III *Units: 1*
- DANC 1191 - Beginning Technique Classes: Beginning Ballet Dance I *Units: 1*
- DANC 1192 - Beginning Technique Classes: Beginning Ballet Dance II *Units: 1*
- DANC 1193 - Beginning Technique Classes: Beginning Ballet Dance III *Units: 1*

Intermediate Technique Courses

- DANC 2131 - Intermediate Technique Classes: Intermediate Hip Hop Dance I *Units: 1*
- DANC 2132 - Intermediate Technique Classes: Intermediate Hip Hop Dance II *Units: 1*
- DANC 2133 - Intermediate Hip Hop Dance III
- DANC 2141 - Intermediate Technique Classes: Intermediate Modern Dance I *Units: 1*
- DANC 2171 - Intermediate Technique Classes: Intermediate Jazz Dance I *Units: 1*
- DANC 2172 - Intermediate Technique Classes: Intermediate Jazz Dance II *Units: 1*
- DANC 2173 - Intermediate Technique Classes: Intermediate Jazz Dance III *Units: 1*
- DANC 2191 - Intermediate Technique Classes: Intermediate Ballet Dance I *Units: 1*
- DANC 2192 - Intermediate Technique Classes: Intermediate Ballet Dance II *Units: 1*
- DANC 2193 - Intermediate Technique Classes: Intermediate Ballet Dance III *Units: 1*

Advanced Technique Courses

- DANC 4141 - Advanced Dance Technique Courses: Advanced Modern Dance I *Units: 2*
- DANC 4142 - Advanced Dance Technique Courses: Advanced Modern Dance II *Units: 2*
- DANC 4143 - Advanced Dance Technique Courses: Advanced Modern Dance III *Units: 2*
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- DANC 4172 - Advanced Dance Technique Courses: Advanced Jazz Dance II *Units: 2*
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- DANC 4191 - Advanced Dance Technique Courses: Advanced/Intermediate Ballet Dance I *Units: 2*
- DANC 4192 - Advanced Dance Technique Courses: Advanced/Intermediate Ballet Dance II *Units: 2*
- DANC 4193 - Advanced Dance Technique Courses: Advanced/Intermediate Ballet Dance III *Units: 2*

Dance History Course

- DANC 4201 - Dance in Modern Society *Units: 4*

Musical Theatre

- THEA 2044 - Fundamental Musical Theatre Techniques *Units: 3*
- THEA 2045 - Applied Singing for Musical Theatre A *Units: 1*
- THEA 2046 - Applied Singing for Musical Theatre B *Units: 1*
- THEA 2047 - Applied Singing for Musical Theatre C *Units: 1*
- THEA 2062 - Musical Theatre Show Choir B *Units: 2*
- THEA 2063 - Musical Theatre Show Choir C *Units: 2*
- THEA 3041 - Advanced Applied Singing for Musical Theatre I *Units: 1*
- THEA 3042 - Advanced Applied Singing for Musical Theatre II *Units: 1*

- THEA 3043 - Advanced Applied Singing for Musical Theatre III *Units: 1*
- THEA 3048 - Musical Theatre Technique I *Units: 3*
- THEA 3049 - Musical Theatre Technique II *Units: 3*
- THEA 3216 - History of Musical Theatre *Units: 4*
- THEA 4040 - Musical Theatre Journal Review *Units: 1*
- THEA 4048 - Advanced Musical Ensemble A *Units: 3*
- THEA 4049 - Advanced Musical Ensemble B *Units: 3*
- DANC 2121 - Musical Theatre Dance B *Units: 2*
- DANC 2122 - Musical Theatre Dance C *Units: 2*
- DANC 2123 - Musical Theatre Dance D *Units: 2*
- DANC 2124 - Musical Theatre Dance E *Units: 2*
- DANC 2125 - Musical Theatre Dance F *Units: 2*

Production and Performance

- THEA 1490 - Theatre Production Activity Courses: Costume or Backstage Activity A *Units: 2*
- THEA 2490 - Theatre Production Activity Courses: Costume or Backstage Activity B *Units: 2*
- THEA 3490 - Theatre Production Activity Courses: Costume or Backstage Activity C *Units: 2*
- THEA 4490 - Theatre Production Activity Courses: Costume or Backstage Activity D *Units: 2*
- THEA 1491 - Theatre Production Activity Courses: Musical Theatre Production A *Units: 4*
- THEA 2491 - Theatre Production Activity Courses: Musical Theatre Production B *Units: 4*
- THEA 3491 - Theatre Production Activity Courses: Musical Theatre Production C *Units: 4*
- THEA 4491 - Theatre Production Activity Courses: Musical Theatre Production D *Units: 4*
- THEA 1492 - Theatre Production Activity Courses: Stage Crew Activity A *Units: 2*
- THEA 2492 - Theatre Production Activity Courses: Stage Crew Activity B *Units: 2*
- THEA 3492 - Theatre Production Activity Courses: Stage Crew Activity C *Units: 2*
- THEA 4492 - Theatre Production Activity Courses: Stage Crew Activity D *Units: 2*
- THEA 1493 - Theatre Production Activity Courses: Production Staff Activity A *Units: 3*
- THEA 2493 - Theatre Production Activity Courses: Production Staff Activity B *Units: 3*
- THEA 3493 - Theatre Production Activity Courses: Production Staff Activity C *Units: 3*
- THEA 4493 - Theatre Production Activity Courses: Production Staff Activity D *Units: 3*
- THEA 1494 - Theatre Production Activity Courses: Festival Activity A *Units: 2*
- THEA 2494 - Theatre Production Activity Courses: Festival Activity B *Units: 2*
- THEA 3494 - Theatre Production Activity Courses: Festival Activity C *Units: 2*
- THEA 4494 - Theatre Production Activity Courses: Festival Activity D *Units: 2*
- THEA 1495 - Theatre Production Activity Courses: Studio Production Activity A *Units: 4*
- THEA 2495 - Theatre Production Activity Courses: Studio Production Activity B *Units: 4*
- THEA 3495 - Theatre Production Activity Courses: Studio Production Activity C *Units: 4*
- THEA 4495 - Theatre Production Activity Courses: Studio Production Activity D *Units: 4*
- THEA 1497 - Theatre Production Activity Courses: Special Workshop or Production A *Units: 1-12*
- THEA 2497 - Theatre Production Activity Courses: Special Workshop or Production B *Units: 1-12*
- THEA 3497 - Theatre Production Activity Courses: Special Workshop or Production C *Units: 1-12*
- THEA 4497 - Theatre Production Activity Courses: Special Workshop or Production D *Units: 1-12*
- THEA 1499 - Theatre Production Activity Courses: Production Practicum A *Units: 4*
- THEA 2499 - Theatre Production Activity Courses: Production Practicum B *Units: 4*
- THEA 3499 - Theatre Production Activity Courses: Production Practicum C *Units: 4*
- THEA 4499 - Theatre Production Activity Courses: Production Practicum D *Units: 4*

Technology and Design

Foundation Technique Courses

- THEA 2421 - Fundamental Backstage Technology: Wood Scenery: Walls and Levels *Units: 1*
- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2424 - Fundamental Backstage Technology: Sound: Recording *Units: 1*
- THEA 2425 - Fundamental Backstage Technology: Stage Effects *Units: 1*
- THEA 2428 - Fundamental Backstage Technology: Sound: PA *Units: 1*
- THEA 2430 - Fundamental Backstage Technology: Practical Make-up *Units: 1*
- THEA 2450 - Vectorworks CADD for Lights and Scenery *Units: 1*

Advanced Technique Courses

- THEA 3422 - History of Costume *Units: 4*
- THEA 3423 - Non-Western Costume *Units: 4*
- THEA 3424 - Scene Painting and Graphic Language *Units: 4*
- THEA 3426 - The Art of the Kimono *Units: 4*
- THEA 3427 - Fashion History *Units: 4*
- THEA 3428 - Fashion Design *Units: 4*
- THEA 4418 - Advanced Makeup and Maskmaking *Units: 2*

Theatre Arts, Directing and Creative Vision Option, B.A.

Program Description

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4. reflect on performance techniques and concepts of other performers and apply high standards of reflection to their own production work.
5. solve problems of production by creating roles, dancing, designing, managing, building, directing, or choreographing performances that address issues of life in striking and remarkable ways.

Career Opportunities

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- Business Agent
- Choreographer
- College Student Services

- Comedian
- Corporate Officer
- Costume Designer
- Costume Technician
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Five Beginning or Intermediate dance technique courses (5) (Limited to Ballet, Hip Hop, Modern, Musical Theatre, or Jazz)

One course (2 units) from:

- THEA 2061 - Musical Theatre Show Choir A *Units: 2*
- THEA 2062 - Musical Theatre Show Choir B *Units: 2*
- THEA 2063 - Musical Theatre Show Choir C *Units: 2*

Three technology and design courses (3 units) from:

- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2424 - Fundamental Backstage Technology: Sound: Recording *Units: 1*

B. Acting (10 units)

- THEA 2031 - Stage Voice A *Units: 1*
- THEA 2032 - Stage Voice B *Units: 1*

One course (2 units) from:

- THEA 2061 - Musical Theatre Show Choir A *Units: 2*
- THEA 2062 - Musical Theatre Show Choir B *Units: 2*
- THEA 2063 - Musical Theatre Show Choir C *Units: 2*

At least three (3) units from:

- DANC 1191 - Beginning Technique Classes: Beginning Ballet Dance I *Units: 1*
- DANC 1192 - Beginning Technique Classes: Beginning Ballet Dance II *Units: 1*
- DANC 1193 - Beginning Technique Classes: Beginning Ballet Dance III *Units: 1*
- DANC 2120 - Musical Theatre Dance A *Units: 2*
- DANC 2121 - Musical Theatre Dance B *Units: 2*
- DANC 2122 - Musical Theatre Dance C *Units: 2*
- DANC 2123 - Musical Theatre Dance D *Units: 2*
- DANC 2124 - Musical Theatre Dance E *Units: 2*
- DANC 2125 - Musical Theatre Dance F *Units: 2*

Three technology and design courses (3 units) from:

- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2428 - Fundamental Backstage Technology: Sound: PA *Units: 1*

C. Technology and Design (10 units)

- THEA 1020 - Discover Acting *Units: 3*

Five technology and design courses (5 units) from:

- THEA 2421 - Fundamental Backstage Technology: Wood Scenery: Walls and Levels *Units: 1*
- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2424 - Fundamental Backstage Technology: Sound: Recording *Units: 1*

- THEA 2425 - Fundamental Backstage Technology: Stage Effects *Units: 1*
- THEA 2428 - Fundamental Backstage Technology: Sound: PA *Units: 1*
- THEA 2429 - Fundamental Backstage Technology: Practical Drafting and Model Building *Units: 1*
- THEA 2430 - Fundamental Backstage Technology: Practical Make-up *Units: 1*
- THEA 2431 Fundamental Backstage Technology

Two (2) units from:

- DANC 1191 - Beginning Technique Classes: Beginning Ballet Dance I *Units: 1*
- DANC 1192 - Beginning Technique Classes: Beginning Ballet Dance II *Units: 1*
- DANC 1193 - Beginning Technique Classes: Beginning Ballet Dance III *Units: 1*
- DANC 1141 - Beginning Technique Classes: Beginning Modern Dance I *Units: 1*
- DANC 1142 - Beginning Technique Classes: Beginning Modern Dance II *Units: 1*
- DANC 1143 - Beginning Technique Classes: Beginning Modern Dance III *Units: 1*

II. Common Core (30 units)

One lower division THEA or DANC course (see the Subject Area Course List (SACL) (4)

- DANC 3251 - Movement Analysis *Units: 4*
- DANC 3252 - Dance Through the Ages *Units: 4*
- THEA 3253 - Theatre Through the Ages *Units: 4*
- THEA 3254 - Scenery, Lights, and Sound Concepts *Units: 4*
- THEA 3255 - Costumes and Makeup Concepts *Units: 4*
- THEA 3256 - Directing: Text to Stage *Units: 3*
- THEA 3257 - Design for Stage *Units: 3*

III. Advanced Electives (19 units)

Theatre History and Literature Elective (4 units)

One additional course in Theatre History and Literature (or) Dance History. Students who intend to complete the Dance Option should take DANC 4201.

Advanced Technique Elective (6 units)

Two additional courses in advanced technique. Take courses numbered 3000 or above in ONE area of emphasis: Acting, Dance, or Technology and Design.

Production and Performance (9 units)

At least three Production and Performance courses, numbered 3000 and above, covering at least three show assignments during the final two years.

IV. Culmination and Assessment (10 units)

Each student must complete a Senior Culmination Project to include either a performance project in the Senior Festival, a written thesis, or a substantial internship. Students may substitute internship credit or thesis-related Independent Study credit for their Senior Festival courses.

- THEA 4151 - Senior Festival Preproduction *Units: 3*
- THEA 4152 - Senior Festival Performance *Units: 3*
- THEA 4155 - Career Management Issues in Theatre Arts *Units: 4*

Directing and Creative Vision Option (22 units)

Total major units with this option: 97.

History and Literature (4 units)

- Complete one additional course in Theatre History and Literature from the following:
- THEA 3201 - Classical Greek and Roman Drama *Units: 4*
- THEA 3202 - European Medieval and Renaissance Drama *Units: 4*
- THEA 3203 - Modern European Drama *Units: 4*
- THEA 3207 - Modern American Theatre *Units: 4*
- THEA 3216 - History of Musical Theatre *Units: 4*
- THEA 3220 - The History of Black Theatre *Units: 4*
- THEA 4375 - Ethnic and Immigrant Theatre in the United States *Units: 4*

Advanced Technique (12 units)

Complete twelve units from the groups below. No more than six units may be applied from one group.

Dance Vision

- DANC 3461 - Inclusive Interdisciplinary Ensemble A *Units: 2*
- DANC 3462 - Inclusive Interdisciplinary Ensemble B *Units: 2*
- DANC 3463 - Inclusive Interdisciplinary Ensemble C *Units: 2*
- DANC 3464 - Inclusive Interdisciplinary Ensemble D *Units: 2*
- DANC 3465 - Inclusive Interdisciplinary Ensemble E *Units: 2*
- DANC 3466 - Inclusive Interdisciplinary Ensemble F *Units: 2*
- DANC 3451 - Dance Ensemble A *Units: 3*
- DANC 3452 - Dance Ensemble B *Units: 3*
- DANC 3453 - Dance Ensemble C *Units: 3*
- DANC 3454 - Dance Ensemble D *Units: 3*
- DANC 3455 - Dance Ensemble E *Units: 3*
- DANC 3456 - Dance Ensemble F *Units: 3*

Theatre Vision

- THEA 3070 - Leadership in Cultural Production *Units: 2*
- THEA 3071 - Creating a Cultural Production *Units: 2*
- THEA 3073 - Solo Performance: Research Methods *Units: 3*
- THEA 3074 - Solo Performance: Talk Story Techniques *Units: 3*
- THEA 3075 - Solo Performance: Writing about Political and Social Issues *Units: 3*
- THEA 3078 - Solo Performance: Production *Units: 4*

Standard Directing

- THEA 3052 - Acting for the Camera *Units: 4*
- THEA 4032 - Period Acting Style: Restoration and Moliere *Units: 3*
- THEA 4034 - Period Acting Style: Shakespeare *Units: 3*
- THEA 4038 - Acting Studio I *Units: 3*

Note: In these classes, Directing and Creative Vision students will direct classroom scenes.

Technology and Design

- THEA 3422 - History of Costume *Units: 4*
- THEA 3423 - Non-Western Costume *Units: 4*
- THEA 3424 - Scene Painting and Graphic Language *Units: 4*

Production and Performance (minimum 6 units)

Complete at least two additional Production and Performance courses numbered 4490-4499. *Note:* Assignments for these courses must be creative projects approved by the chair and advisor in advance. Candidates for the Option must submit a project journal to their advisor for evaluation upon completion of each assignment. Both project and journals will be considered in grading the assignments.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Subject Area Course Lists (SACL)

Common Core-acceptable Lower Division Courses

Four-year CSUEB students should take any THEA or DANC course in a First Year General Education Cluster. Transfer students may petition the Chair to substitute a course with the following types of content: a theatre literature and history course with required reading of at least six plays, a performance appreciation course that required attendance and a review of at least four shows, a script analysis course, or a creative methods course (specifically any course that articulates with DANC 1200). Transfer students may also meet the requirement with one of the courses approved for four-year students. Substitutes require advanced approval of the Chair.

Acting

- THEA 2031 - Stage Voice A *Units: 1*
- THEA 2032 - Stage Voice B *Units: 1*
- THEA 2035 - Fundamentals of Acting *Units: 3*
- THEA 2037 - Acting 20th Century Drama and Diversity *Units: 3*
- THEA 2055 - Intermediate Acting I *Units: 2*
- THEA 2061 - Musical Theatre Show Choir A *Units: 2*
- THEA 2062 - Musical Theatre Show Choir B *Units: 2*
- THEA 2063 - Musical Theatre Show Choir C *Units: 2*
- THEA 3052 - Acting for the Camera *Units: 4*
- THEA 3056 - Intermediate Acting II *Units: 2*
- THEA 3057 - Intermediate Acting III *Units: 2*
- THEA 3064 - Audition Techniques and Talent Analysis I *Units: 1*
- THEA 3065 - Audition Techniques and Talent Analysis II *Units: 1*
- THEA 4032 - Period Acting Style: Restoration and Moliere *Units: 3*
- THEA 4034 - Period Acting Style: Shakespeare *Units: 3*
- THEA 4038 - Acting Studio I *Units: 3*
- THEA 4039 - Acting Studio II *Units: 3*

Dance

Fundamental Courses

- DANC 2020 - Rhythm and Music for Dance *Units: 2*
- DANC 2341 - Improvisation in Art and Life *Units: 2*
- DANC 2342 - Integrating Theatre and Dance *Units: 2*
- DANC 2343 - Body and Mind Training for Performance *Units: 2*
- DANC 2344 - Site Specific Performance *Units: 2*

Beginning Technique Courses

- DANC 1131 - Beginning Technique Classes: Beginning Hip Hop Dance I *Units: 1*
- DANC 1132 - Beginning Technique Classes: Beginning Hip Hop Dance II *Units: 1*
- DANC 1133 - Beginning Technique Classes: Beginning Hip Hop Dance III *Units: 1*
- DANC 1141 - Beginning Technique Classes: Beginning Modern Dance I *Units: 1*
- DANC 1142 - Beginning Technique Classes: Beginning Modern Dance II *Units: 1*
- DANC 1143 - Beginning Technique Classes: Beginning Modern Dance III *Units: 1*
- DANC 1171 - Beginning Technique Classes: Beginning Jazz Dance I *Units: 1*
- DANC 1172 - Beginning Technique Classes: Beginning Jazz Dance II *Units: 1*
- DANC 1173 - Beginning Technique Classes: Beginning Jazz Dance III *Units: 1*
- DANC 1191 - Beginning Technique Classes: Beginning Ballet Dance I *Units: 1*
- DANC 1192 - Beginning Technique Classes: Beginning Ballet Dance II *Units: 1*
- DANC 1193 - Beginning Technique Classes: Beginning Ballet Dance III *Units: 1*

Intermediate Technique Courses

- DANC 2131 - Intermediate Technique Classes: Intermediate Hip Hop Dance I *Units: 1*
- DANC 2132 - Intermediate Technique Classes: Intermediate Hip Hop Dance II *Units: 1*
- DANC 2133 - Intermediate Hip Hop Dance III
- DANC 2141 - Intermediate Technique Classes: Intermediate Modern Dance I *Units: 1*
- DANC 2171 - Intermediate Technique Classes: Intermediate Jazz Dance I *Units: 1*
- DANC 2172 - Intermediate Technique Classes: Intermediate Jazz Dance II *Units: 1*
- DANC 2173 - Intermediate Technique Classes: Intermediate Jazz Dance III *Units: 1*
- DANC 2191 - Intermediate Technique Classes: Intermediate Ballet Dance I *Units: 1*
- DANC 2192 - Intermediate Technique Classes: Intermediate Ballet Dance II *Units: 1*
- DANC 2193 - Intermediate Technique Classes: Intermediate Ballet Dance III *Units: 1*

Advanced Technique Courses

- DANC 4141 - Advanced Dance Technique Courses: Advanced Modern Dance I *Units: 2*
- DANC 4142 - Advanced Dance Technique Courses: Advanced Modern Dance II *Units: 2*
- DANC 4143 - Advanced Dance Technique Courses: Advanced Modern Dance III *Units: 2*
- DANC 4171 - Advanced Dance Technique Courses: Advanced Jazz Dance I *Units: 2*
- DANC 4172 - Advanced Dance Technique Courses: Advanced Jazz Dance II *Units: 2*
- DANC 4173 - Advanced Dance Technique Courses: Advanced Jazz Dance III *Units: 2*
- DANC 4191 - Advanced Dance Technique Courses: Advanced/Intermediate Ballet Dance I *Units: 2*
- DANC 4192 - Advanced Dance Technique Courses: Advanced/Intermediate Ballet Dance II *Units: 2*
- DANC 4193 - Advanced Dance Technique Courses: Advanced/Intermediate Ballet Dance III *Units: 2*

Dance History Course

- DANC 4201 - Dance in Modern Society *Units: 4*

Musical Theatre

- THEA 2044 - Fundamental Musical Theatre Techniques *Units: 3*
- THEA 2045 - Applied Singing for Musical Theatre A *Units: 1*
- THEA 2046 - Applied Singing for Musical Theatre B *Units: 1*
- THEA 2047 - Applied Singing for Musical Theatre C *Units: 1*
- THEA 2062 - Musical Theatre Show Choir B *Units: 2*
- THEA 2063 - Musical Theatre Show Choir C *Units: 2*
- THEA 3041 - Advanced Applied Singing for Musical Theatre I *Units: 1*
- THEA 3042 - Advanced Applied Singing for Musical Theatre II *Units: 1*
- THEA 3043 - Advanced Applied Singing for Musical Theatre III *Units: 1*
- THEA 3048 - Musical Theatre Technique I *Units: 3*
- THEA 3049 - Musical Theatre Technique II *Units: 3*
- THEA 3216 - History of Musical Theatre *Units: 4*
- THEA 4040 - Musical Theatre Journal Review *Units: 1*
- THEA 4048 - Advanced Musical Ensemble A *Units: 3*
- THEA 4049 - Advanced Musical Ensemble B *Units: 3*
- DANC 2121 - Musical Theatre Dance B *Units: 2*
- DANC 2122 - Musical Theatre Dance C *Units: 2*
- DANC 2123 - Musical Theatre Dance D *Units: 2*
- DANC 2124 - Musical Theatre Dance E *Units: 2*
- DANC 2125 - Musical Theatre Dance F *Units: 2*

Production and Performance

- THEA 1490 - Theatre Production Activity Courses: Costume or Backstage Activity A *Units: 2*
- THEA 2490 - Theatre Production Activity Courses: Costume or Backstage Activity B *Units: 2*
- THEA 3490 - Theatre Production Activity Courses: Costume or Backstage Activity C *Units: 2*
- THEA 4490 - Theatre Production Activity Courses: Costume or Backstage Activity D *Units: 2*
- THEA 1491 - Theatre Production Activity Courses: Musical Theatre Production A *Units: 4*
- THEA 2491 - Theatre Production Activity Courses: Musical Theatre Production B *Units: 4*
- THEA 3491 - Theatre Production Activity Courses: Musical Theatre Production C *Units: 4*
- THEA 4491 - Theatre Production Activity Courses: Musical Theatre Production D *Units: 4*
- THEA 1492 - Theatre Production Activity Courses: Stage Crew Activity A *Units: 2*
- THEA 2492 - Theatre Production Activity Courses: Stage Crew Activity B *Units: 2*
- THEA 3492 - Theatre Production Activity Courses: Stage Crew Activity C *Units: 2*
- THEA 4492 - Theatre Production Activity Courses: Stage Crew Activity D *Units: 2*
- THEA 1493 - Theatre Production Activity Courses: Production Staff Activity A *Units: 3*
- THEA 2493 - Theatre Production Activity Courses: Production Staff Activity B *Units: 3*
- THEA 3493 - Theatre Production Activity Courses: Production Staff Activity C *Units: 3*
- THEA 4493 - Theatre Production Activity Courses: Production Staff Activity D *Units: 3*
- THEA 1494 - Theatre Production Activity Courses: Festival Activity A *Units: 2*
- THEA 2494 - Theatre Production Activity Courses: Festival Activity B *Units: 2*
- THEA 3494 - Theatre Production Activity Courses: Festival Activity C *Units: 2*
- THEA 4494 - Theatre Production Activity Courses: Festival Activity D *Units: 2*
- THEA 1495 - Theatre Production Activity Courses: Studio Production Activity A *Units: 4*
- THEA 2495 - Theatre Production Activity Courses: Studio Production Activity B *Units: 4*
- THEA 3495 - Theatre Production Activity Courses: Studio Production Activity C *Units: 4*
- THEA 4495 - Theatre Production Activity Courses: Studio Production Activity D *Units: 4*
- THEA 1497 - Theatre Production Activity Courses: Special Workshop or Production A *Units: 1-12*
- THEA 2497 - Theatre Production Activity Courses: Special Workshop or Production B *Units: 1-12*
- THEA 3497 - Theatre Production Activity Courses: Special Workshop or Production C *Units: 1-12*
- THEA 4497 - Theatre Production Activity Courses: Special Workshop or Production D *Units: 1-12*
- THEA 1499 - Theatre Production Activity Courses: Production Practicum A *Units: 4*

- THEA 2499 - Theatre Production Activity Courses: Production Practicum B *Units: 4*
- THEA 3499 - Theatre Production Activity Courses: Production Practicum C *Units: 4*
- THEA 4499 - Theatre Production Activity Courses: Production Practicum D *Units: 4*

Technology and Design

Foundation Technique Courses

- THEA 2421 - Fundamental Backstage Technology: Wood Scenery: Walls and Levels *Units: 1*
- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2424 - Fundamental Backstage Technology: Sound: Recording *Units: 1*
- THEA 2425 - Fundamental Backstage Technology: Stage Effects *Units: 1*
- THEA 2428 - Fundamental Backstage Technology: Sound: PA *Units: 1*
- THEA 2430 - Fundamental Backstage Technology: Practical Make-up *Units: 1*
- THEA 2450 - Vectorworks CADD for Lights and Scenery *Units: 1*

Advanced Technique Courses

- THEA 3422 - History of Costume *Units: 4*
- THEA 3423 - Non-Western Costume *Units: 4*
- THEA 3424 - Scene Painting and Graphic Language *Units: 4*
- THEA 3426 - The Art of the Kimono *Units: 4*
- THEA 3427 - Fashion History *Units: 4*
- THEA 3428 - Fashion Design *Units: 4*
- THEA 4418 - Advanced Makeup and Maskmaking *Units: 2*

Theatre Arts, Musical Theatre Option, B.A.

Program Description

The Department of Theatre and Dance provides comprehensive pre-professional training in the areas of acting, directing, dance, design, theatre technology, and musical theatre. The primary goal of the program is to develop artists whose performance skills and creativity are supported by a firm background in history, literature, and aesthetics. In an environment designed to encourage creativity and self-expression, each student has opportunities to participate in various specializations within the major—acting, costuming, dance, directing, scenery, lighting, sound, creative vision, or management. Students perform regularly in a variety of theatre and dance productions.

Theatre Arts graduates acquire a range of skills. This enables them to pursue different professional options. Many have entered advanced studies in nationally recognized universities and conservatories. Some have chosen careers in teaching, while others have gone directly into theatre or dance performance. Alumni perform on professional stages around the world, including Broadway and Hollywood. Some have been nominated for Tonys, Emmys, and Oscars; and, one designer won an Emmy and Art Directors Guild award. Employers in other professions desire Theatre Arts graduates for their team skills, their imaginative approach to problems, and their ability to communicate creatively.

Student Learning Outcomes

Students graduating with a B.A. in Theatre Arts from Cal State East Bay will be able to:

1. communicate in writing, orally, non-verbally, and visually in their area of emphasis.
2. conduct background research, evaluate scripts, and analyze performance for use in scholarly and performance applications.
3. employ historical, contemporary, and cultural performance techniques, as well as production technology appropriate to their area of emphasis.
4. reflect on performance techniques and concepts of other performers and apply high standards of reflection to their own production work.
5. solve problems of production by creating roles, dancing, designing, managing, building, directing, or choreographing performances that address issues of life in striking and remarkable ways.

Career Opportunities

- Actor/Actress
- Broadcast Technician
- Business Agent
- Choreographer
- College Student Services
- Comedian
- Corporate Officer
- Costume Designer
- Costume Technician
- Dancer
- Director
- Drama or Dance Teacher/Professor
- Dramaturg
- Lighting Technician
- Make-Up Artist/Specialist
- Non-profit Manager
- Performing Arts Fundraiser
- Playwright
- Producer
- Recreation Supervisor
- Sales Manager
- Set Decorator
- Set Designer
- Sound Technician
- Stage Manager
- Theatre Critic
- Theatre Technician
- Theatre Manager

Features

The Department of Theatre and Dance produces approximately 5-8 plays and dance concerts during the year. The selection of plays exposes students to design, acting, dance, singing, directing, stage management, and technical theatre suitable to a wide variety of styles, periods, and genres from Shakespeare to American Realism and from Greek Tragedy to Modern Drama.

The department has several ensemble groups, including Musical Theatre, Dance, Acting, Inclusive Interdisciplinary, and Design/Technology, that add to a varied and challenging performance schedule. Since 1990, sixteen department productions have toured to the Edinburgh Festival Fringe in Scotland and three other countries as part of the summer program.

The Theatre and Dance Department is fortunate to have excellent facilities including the 460 seat University Theatre, scene shop, costume shop, a sixteen-station design/drafting studio with a separate digital lab, two studio classrooms, green room, make-up room, dressing rooms with lockers and showers, and a spacious Dance Studio.

Major Requirements (B.A.)

The Theatre Arts major consists of 75-106 units, depending upon whether or not students choose an option. The Theatre Arts major without an option consists of 75 units. The B.A. degree requires a total of 180 units.

I. Beginning Electives (16 units)

Complete three show assignments (6 units) in the first two years as follows: three Production and Performance courses (THEA 1490 through THEA 1499 and THEA 2490 through 2499) as defined by the Subject Area Course List.

Complete ten units in ONE of the following areas of emphasis: Dance, Acting, or Technology and Design. Unless specified, courses should be numbered below 2999, and listed in the Subject Area Course List.

A. Dance (10 units)

Five Beginning or Intermediate dance technique courses (5) (Limited to Ballet, Hip Hop, Modern, Musical Theatre, or Jazz)

One course (2 units) from:

- THEA 2061 - Musical Theatre Show Choir A *Units: 2*
- THEA 2062 - Musical Theatre Show Choir B *Units: 2*
- THEA 2063 - Musical Theatre Show Choir C *Units: 2*

Three technology and design courses (3 units) from:

- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2424 - Fundamental Backstage Technology: Sound: Recording *Units: 1*

B. Acting (10 units)

- THEA 2031 - Stage Voice A *Units: 1*
- THEA 2032 - Stage Voice B *Units: 1*

One course (2 units) from:

- THEA 2061 - Musical Theatre Show Choir A *Units: 2*
- THEA 2062 - Musical Theatre Show Choir B *Units: 2*
- THEA 2063 - Musical Theatre Show Choir C *Units: 2*

At least three (3) units from:

- DANC 1191 - Beginning Technique Classes: Beginning Ballet Dance I *Units: 1*
- DANC 1192 - Beginning Technique Classes: Beginning Ballet Dance II *Units: 1*
- DANC 1193 - Beginning Technique Classes: Beginning Ballet Dance III *Units: 1*
- DANC 2120 - Musical Theatre Dance A *Units: 2*
- DANC 2121 - Musical Theatre Dance B *Units: 2*
- DANC 2122 - Musical Theatre Dance C *Units: 2*
- DANC 2123 - Musical Theatre Dance D *Units: 2*
- DANC 2124 - Musical Theatre Dance E *Units: 2*
- DANC 2125 - Musical Theatre Dance F *Units: 2*

Three technology and design courses (3 units) from:

- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2428 - Fundamental Backstage Technology: Sound: PA *Units: 1*

C. Technology and Design (10 units)

- THEA 1020 - Discover Acting *Units: 3*

Five technology and design courses (5 units) from:

- THEA 2421 - Fundamental Backstage Technology: Wood Scenery: Walls and Levels *Units: 1*
- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2424 - Fundamental Backstage Technology: Sound: Recording *Units: 1*
- THEA 2425 - Fundamental Backstage Technology: Stage Effects *Units: 1*
- THEA 2428 - Fundamental Backstage Technology: Sound: PA *Units: 1*
- THEA 2429 - Fundamental Backstage Technology: Practical Drafting and Model Building *Units: 1*
- THEA 2430 - Fundamental Backstage Technology: Practical Make-up *Units: 1*
- THEA 2431 Fundamental Backstage Technology

Two (2) units from:

- DANC 1191 - Beginning Technique Classes: Beginning Ballet Dance I *Units: 1*
- DANC 1192 - Beginning Technique Classes: Beginning Ballet Dance II *Units: 1*
- DANC 1193 - Beginning Technique Classes: Beginning Ballet Dance III *Units: 1*
- DANC 1141 - Beginning Technique Classes: Beginning Modern Dance I *Units: 1*
- DANC 1142 - Beginning Technique Classes: Beginning Modern Dance II *Units: 1*
- DANC 1143 - Beginning Technique Classes: Beginning Modern Dance III *Units: 1*

II. Common Core (30 units)

One lower division THEA or DANC course (see the Subject Area Course List (SACL) (4)

- DANC 3251 - Movement Analysis *Units: 4*
- DANC 3252 - Dance Through the Ages *Units: 4*
- THEA 3253 - Theatre Through the Ages *Units: 4*
- THEA 3254 - Scenery, Lights, and Sound Concepts *Units: 4*
- THEA 3255 - Costumes and Makeup Concepts *Units: 4*
- THEA 3256 - Directing: Text to Stage *Units: 3*
- THEA 3257 - Design for Stage *Units: 3*

III. Advanced Electives (19 units)

Theatre History and Literature Elective (4 units)

One additional course in Theatre History and Literature (or) Dance History. Students who intend to complete the Dance Option should take DANC 4201.

Advanced Technique Elective (6 units)

Two additional courses in advanced technique. Take courses numbered 3000 or above in ONE area of emphasis: Acting, Dance, or Technology and Design.

Production and Performance (9 units)

At least three Production and Performance courses, numbered 3000 and above, covering at least three show assignments during the final two years.

IV. Culmination and Assessment (10 units)

Each student must complete a Senior Culmination Project to include either a performance project in the Senior Festival, a written thesis, or a substantial internship. Students may substitute internship credit or thesis-related Independent Study credit for their Senior Festival courses.

- THEA 4151 - Senior Festival Preproduction *Units: 3*
- THEA 4152 - Senior Festival Performance *Units: 3*
- THEA 4155 - Career Management Issues in Theatre Arts *Units: 4*

Options (13-31 units)

An Option is not required. Options provide the opportunity to explore a specialized mode of theatre arts beyond the level of the basic emphasis required to graduate. Options allow sufficient depth of study to prepare for graduate school or entry-level work in a semi-professional company and involve additional work beyond the major requirements listed above. The department's graduates have found work in professional nonprofit companies after completing an internship as part of their CSUEB program. The additional work required for an option will prove useful in obtaining a quality internship or graduate school placement, so we recommend that students complete most of their option before seeking an internship. Acceptable courses are listed in the Subject Area Course List.

Musical Theatre Option (31 units)

Total major units with this option: 106 units

- THEA 2035 - Fundamentals of Acting *Units: 3*
- THEA 2045 - Applied Singing for Musical Theatre A *Units: 1*
- THEA 2046 - Applied Singing for Musical Theatre B *Units: 1*
- THEA 2047 - Applied Singing for Musical Theatre C *Units: 1*
- THEA 2055 - Intermediate Acting I *Units: 2*
- THEA 2044 - Fundamental Musical Theatre Techniques *Units: 3*
- THEA 3041 - Advanced Applied Singing for Musical Theatre I *Units: 1*
- THEA 3042 - Advanced Applied Singing for Musical Theatre II *Units: 1*
- THEA 3043 - Advanced Applied Singing for Musical Theatre III *Units: 1*
- THEA 4040 - Musical Theatre Journal Review *Units: 1*
- THEA 4048 - Advanced Musical Ensemble A *Units: 3*
- THEA 4049 - Advanced Musical Ensemble B *Units: 3*

Complete the B.A. Theatre Arts

- Complete the B.A. Theatre Arts Beginning Electives for the Acting Emphasis.

Optional: Audition

- *Optional:* Audition for winter musical production in first year.

Complete five additional quarters of musical dance from the following: (10)

- DANC 2120 - Musical Theatre Dance A *Units: 2*
- DANC 2121 - Musical Theatre Dance B *Units: 2*
- DANC 2122 - Musical Theatre Dance C *Units: 2*
- DANC 2123 - Musical Theatre Dance D *Units: 2*
- DANC 2124 - Musical Theatre Dance E *Units: 2*
- DANC 2125 - Musical Theatre Dance F *Units: 2*

Audition for

and take winter musical production for credit in second through fourth year. Take on of the following courses each time and apply them to the appropriate Production and Performance requirements in the major.

- THEA 2491 - Theatre Production Activity Courses: Musical Theatre Production B *Units: 4*
- THEA 3491 - Theatre Production Activity Courses: Musical Theatre Production C *Units: 4*
- THEA 4491 - Theatre Production Activity Courses: Musical Theatre Production D *Units: 4*

Take the following courses

and apply them to the Advanced Elective requirement in the major.

- THEA 3048 - Musical Theatre Technique I *Units: 3*
- THEA 3049 - Musical Theatre Technique II *Units: 3*
- THEA 3216 - History of Musical Theatre *Units: 4*

Notes:

1. Applied singing courses (lessons) are by audition and might require a course fee. Option students are required to take regular singing lessons.
2. Option students are required to perform twice each year in Year Two through Four. As shown above, option students must audition for the winter musical three years and perform in three department musicals. Off campus productions allowed by agreement with an advisor. Journal required for each production.
3. The following Music courses are highly recommended, but not required. Note that success in sightsinging requires experience reading music or concurrent enrollment in Music Theory. Without experience, consider taking a basic musicianship class for nonmajors first.
 - MUS 1027 - Sightsinging I *Units: 1*
 - MUS 1028 - Sightsinging II *Units: 1*
 - MUS 1029 - Sightsinging III *Units: 1*
 - MUS 1031 - Music Theory I *Units: 4*
 - MUS 1032 - Music Theory II *Units: 4*
 - MUS 1033 - Music Theory III *Units: 4*

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Subject Area Course Lists (SACL)

Common Core-acceptable Lower Division Courses

Four-year CSUEB students should take any THEA or DANC course in a First Year General Education Cluster. Transfer students may petition the Chair to substitute a course with the following types of content: a theatre literature and history course with required reading of at least six plays, a performance appreciation course that required attendance and a review of at least four shows, a script analysis course, or a creative methods course (specifically any course that articulates with DANC 1200). Transfer students may also meet the requirement with one of the courses approved for four-year students. Substitutes require advanced approval of the Chair.

Acting

- THEA 2031 - Stage Voice A *Units: 1*
- THEA 2032 - Stage Voice B *Units: 1*
- THEA 2035 - Fundamentals of Acting *Units: 3*
- THEA 2037 - Acting 20th Century Drama and Diversity *Units: 3*

- THEA 2055 - Intermediate Acting I *Units: 2*
- THEA 2061 - Musical Theatre Show Choir A *Units: 2*
- THEA 2062 - Musical Theatre Show Choir B *Units: 2*
- THEA 2063 - Musical Theatre Show Choir C *Units: 2*
- THEA 3052 - Acting for the Camera *Units: 4*
- THEA 3056 - Intermediate Acting II *Units: 2*
- THEA 3057 - Intermediate Acting III *Units: 2*
- THEA 3064 - Audition Techniques and Talent Analysis I *Units: 1*
- THEA 3065 - Audition Techniques and Talent Analysis II *Units: 1*
- THEA 4032 - Period Acting Style: Restoration and Moliere *Units: 3*
- THEA 4034 - Period Acting Style: Shakespeare *Units: 3*
- THEA 4038 - Acting Studio I *Units: 3*
- THEA 4039 - Acting Studio II *Units: 3*

Dance

Fundamental Courses

- DANC 2020 - Rhythm and Music for Dance *Units: 2*
- DANC 2341 - Improvisation in Art and Life *Units: 2*
- DANC 2342 - Integrating Theatre and Dance *Units: 2*
- DANC 2343 - Body and Mind Training for Performance *Units: 2*
- DANC 2344 - Site Specific Performance *Units: 2*

Beginning Technique Courses

- DANC 1131 - Beginning Technique Classes: Beginning Hip Hop Dance I *Units: 1*
- DANC 1132 - Beginning Technique Classes: Beginning Hip Hop Dance II *Units: 1*
- DANC 1133 - Beginning Technique Classes: Beginning Hip Hop Dance III *Units: 1*
- DANC 1141 - Beginning Technique Classes: Beginning Modern Dance I *Units: 1*
- DANC 1142 - Beginning Technique Classes: Beginning Modern Dance II *Units: 1*
- DANC 1143 - Beginning Technique Classes: Beginning Modern Dance III *Units: 1*
- DANC 1171 - Beginning Technique Classes: Beginning Jazz Dance I *Units: 1*
- DANC 1172 - Beginning Technique Classes: Beginning Jazz Dance II *Units: 1*
- DANC 1173 - Beginning Technique Classes: Beginning Jazz Dance III *Units: 1*
- DANC 1191 - Beginning Technique Classes: Beginning Ballet Dance I *Units: 1*
- DANC 1192 - Beginning Technique Classes: Beginning Ballet Dance II *Units: 1*
- DANC 1193 - Beginning Technique Classes: Beginning Ballet Dance III *Units: 1*

Intermediate Technique Courses

- DANC 2131 - Intermediate Technique Classes: Intermediate Hip Hop Dance I *Units: 1*
- DANC 2132 - Intermediate Technique Classes: Intermediate Hip Hop Dance II *Units: 1*
- DANC 2133 - Intermediate Hip Hop Dance III
- DANC 2141 - Intermediate Technique Classes: Intermediate Modern Dance I *Units: 1*
- DANC 2171 - Intermediate Technique Classes: Intermediate Jazz Dance I *Units: 1*
- DANC 2172 - Intermediate Technique Classes: Intermediate Jazz Dance II *Units: 1*
- DANC 2173 - Intermediate Technique Classes: Intermediate Jazz Dance III *Units: 1*
- DANC 2191 - Intermediate Technique Classes: Intermediate Ballet Dance I *Units: 1*
- DANC 2192 - Intermediate Technique Classes: Intermediate Ballet Dance II *Units: 1*
- DANC 2193 - Intermediate Technique Classes: Intermediate Ballet Dance III *Units: 1*

Advanced Technique Courses

- DANC 4141 - Advanced Dance Technique Courses: Advanced Modern Dance I *Units: 2*
- DANC 4142 - Advanced Dance Technique Courses: Advanced Modern Dance II *Units: 2*
- DANC 4143 - Advanced Dance Technique Courses: Advanced Modern Dance III *Units: 2*
- DANC 4171 - Advanced Dance Technique Courses: Advanced Jazz Dance I *Units: 2*
- DANC 4172 - Advanced Dance Technique Courses: Advanced Jazz Dance II *Units: 2*
- DANC 4173 - Advanced Dance Technique Courses: Advanced Jazz Dance I *Units: 2*
- DANC 4191 - Advanced Dance Technique Courses: Advanced/Intermediate Ballet Dance I *Units: 2*
- DANC 4192 - Advanced Dance Technique Courses: Advanced/Intermediate Ballet Dance II *Units: 2*
- DANC 4193 - Advanced Dance Technique Courses: Advanced/Intermediate Ballet Dance III *Units: 2*

Dance History Course

- DANC 4201 - Dance in Modern Society *Units: 4*

Musical Theatre

- THEA 2044 - Fundamental Musical Theatre Techniques *Units: 3*
- THEA 2045 - Applied Singing for Musical Theatre A *Units: 1*
- THEA 2046 - Applied Singing for Musical Theatre B *Units: 1*
- THEA 2047 - Applied Singing for Musical Theatre C *Units: 1*
- THEA 2062 - Musical Theatre Show Choir B *Units: 2*
- THEA 2063 - Musical Theatre Show Choir C *Units: 2*
- THEA 3041 - Advanced Applied Singing for Musical Theatre I *Units: 1*
- THEA 3042 - Advanced Applied Singing for Musical Theatre II *Units: 1*
- THEA 3043 - Advanced Applied Singing for Musical Theatre III *Units: 1*
- THEA 3048 - Musical Theatre Technique I *Units: 3*
- THEA 3049 - Musical Theatre Technique II *Units: 3*
- THEA 3216 - History of Musical Theatre *Units: 4*
- THEA 4040 - Musical Theatre Journal Review *Units: 1*
- THEA 4048 - Advanced Musical Ensemble A *Units: 3*
- THEA 4049 - Advanced Musical Ensemble B *Units: 3*
- DANC 2121 - Musical Theatre Dance B *Units: 2*
- DANC 2122 - Musical Theatre Dance C *Units: 2*
- DANC 2123 - Musical Theatre Dance D *Units: 2*
- DANC 2124 - Musical Theatre Dance E *Units: 2*
- DANC 2125 - Musical Theatre Dance F *Units: 2*

Production and Performance

- THEA 1490 - Theatre Production Activity Courses: Costume or Backstage Activity A *Units: 2*
- THEA 2490 - Theatre Production Activity Courses: Costume or Backstage Activity B *Units: 2*
- THEA 3490 - Theatre Production Activity Courses: Costume or Backstage Activity C *Units: 2*
- THEA 4490 - Theatre Production Activity Courses: Costume or Backstage Activity D *Units: 2*
- THEA 1491 - Theatre Production Activity Courses: Musical Theatre Production A *Units: 4*
- THEA 2491 - Theatre Production Activity Courses: Musical Theatre Production B *Units: 4*
- THEA 3491 - Theatre Production Activity Courses: Musical Theatre Production C *Units: 4*
- THEA 4491 - Theatre Production Activity Courses: Musical Theatre Production D *Units: 4*
- THEA 1492 - Theatre Production Activity Courses: Stage Crew Activity A *Units: 2*
- THEA 2492 - Theatre Production Activity Courses: Stage Crew Activity B *Units: 2*
- THEA 3492 - Theatre Production Activity Courses: Stage Crew Activity C *Units: 2*

- THEA 4492 - Theatre Production Activity Courses: Stage Crew Activity D *Units: 2*
- THEA 1493 - Theatre Production Activity Courses: Production Staff Activity A *Units: 3*
- THEA 2493 - Theatre Production Activity Courses: Production Staff Activity B *Units: 3*
- THEA 3493 - Theatre Production Activity Courses: Production Staff Activity C *Units: 3*
- THEA 4493 - Theatre Production Activity Courses: Production Staff Activity D *Units: 3*
- THEA 1494 - Theatre Production Activity Courses: Festival Activity A *Units: 2*
- THEA 2494 - Theatre Production Activity Courses: Festival Activity B *Units: 2*
- THEA 3494 - Theatre Production Activity Courses: Festival Activity C *Units: 2*
- THEA 4494 - Theatre Production Activity Courses: Festival Activity D *Units: 2*
- THEA 1495 - Theatre Production Activity Courses: Studio Production Activity A *Units: 4*
- THEA 2495 - Theatre Production Activity Courses: Studio Production Activity B *Units: 4*
- THEA 3495 - Theatre Production Activity Courses: Studio Production Activity C *Units: 4*
- THEA 4495 - Theatre Production Activity Courses: Studio Production Activity D *Units: 4*
- THEA 1497 - Theatre Production Activity Courses: Special Workshop or Production A *Units: 1-12*
- THEA 2497 - Theatre Production Activity Courses: Special Workshop or Production B *Units: 1-12*
- THEA 3497 - Theatre Production Activity Courses: Special Workshop or Production C *Units: 1-12*
- THEA 4497 - Theatre Production Activity Courses: Special Workshop or Production D *Units: 1-12*
- THEA 1499 - Theatre Production Activity Courses: Production Practicum A *Units: 4*
- THEA 2499 - Theatre Production Activity Courses: Production Practicum B *Units: 4*
- THEA 3499 - Theatre Production Activity Courses: Production Practicum C *Units: 4*
- THEA 4499 - Theatre Production Activity Courses: Production Practicum D *Units: 4*

Technology and Design

Foundation Technique Courses

- THEA 2421 - Fundamental Backstage Technology: Wood Scenery: Walls and Levels *Units: 1*
- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2424 - Fundamental Backstage Technology: Sound: Recording *Units: 1*
- THEA 2425 - Fundamental Backstage Technology: Stage Effects *Units: 1*
- THEA 2428 - Fundamental Backstage Technology: Sound: PA *Units: 1*
- THEA 2430 - Fundamental Backstage Technology: Practical Make-up *Units: 1*
- THEA 2450 - Vectorworks CADD for Lights and Scenery *Units: 1*

Advanced Technique Courses

- THEA 3422 - History of Costume *Units: 4*
- THEA 3423 - Non-Western Costume *Units: 4*
- THEA 3424 - Scene Painting and Graphic Language *Units: 4*
- THEA 3426 - The Art of the Kimono *Units: 4*
- THEA 3427 - Fashion History *Units: 4*
- THEA 3428 - Fashion Design *Units: 4*
- THEA 4418 - Advanced Makeup and Maskmaking *Units: 2*

Theatre Arts, Technology and Design Option, B.A.

Program Description

The Department of Theatre and Dance provides comprehensive pre-professional training in the areas of acting, directing, dance, design, theatre technology, and musical theatre. The primary goal of the program is to develop artists whose performance skills and creativity are supported by a

firm background in history, literature, and aesthetics. In an environment designed to encourage creativity and self-expression, each student has opportunities to participate in various specializations within the major-acting, costuming, dance, directing, scenery, lighting, sound, creative vision, or management. Students perform regularly in a variety of theatre and dance productions.

Theatre Arts graduates acquire a range of skills. This enables them to pursue different professional options. Many have entered advanced studies in nationally recognized universities and conservatories. Some have chosen careers in teaching, while others have gone directly into theatre or dance performance. Alumni perform on professional stages around the world, including Broadway and Hollywood. Some have been nominated for Tonys, Emmys, and Oscars; and, one designer won an Emmy and Art Directors Guild award. Employers in other professions desire Theatre Arts graduates for their team skills, their imaginative approach to problems, and their ability to communicate creatively.

Student Learning Outcomes

Students graduating with a B.A. in Theatre Arts from Cal State East Bay will be able to:

1. communicate in writing, orally, non-verbally, and visually in their area of emphasis.
2. conduct background research, evaluate scripts, and analyze performance for use in scholarly and performance applications.
3. employ historical, contemporary, and cultural performance techniques, as well as production technology appropriate to their area of emphasis.
4. reflect on performance techniques and concepts of other performers and apply high standards of reflection to their own production work.
5. solve problems of production by creating roles, dancing, designing, managing, building, directing, or choreographing performances that address issues of life in striking and remarkable ways.

Career Opportunities

- Actor/Actress
- Broadcast Technician
- Business Agent
- Choreographer
- College Student Services
- Comedian
- Corporate Officer
- Costume Designer
- Costume Technician
- Dancer
- Director
- Drama or Dance Teacher/Professor
- Dramaturg
- Lighting Technician
- Make-Up Artist/Specialist
- Non-profit Manager
- Performing Arts Fundraiser
- Playwright
- Producer
- Recreation Supervisor
- Sales Manager
- Set Decorator
- Set Designer
- Sound Technician
- Stage Manager
- Theatre Critic
- Theatre Technician
- Theatre Manager

Features

The Department of Theatre and Dance produces approximately 5-8 plays and dance concerts during the year. The selection of plays exposes students to design, acting, dance, singing, directing, stage management, and technical theatre suitable to a wide variety of styles, periods, and genres from Shakespeare to American Realism and from Greek Tragedy to Modern Drama.

The department has several ensemble groups, including Musical Theatre, Dance, Acting, Inclusive Interdisciplinary, and Design/Technology, that add to a varied and challenging performance schedule. Since 1990, sixteen department productions have toured to the Edinburgh Festival Fringe in Scotland and three other countries as part of the summer program.

The Theatre and Dance Department is fortunate to have excellent facilities including the 460 seat University Theatre, scene shop, costume shop, a sixteen-station design/drafting studio with a separate digital lab, two studio classrooms, green room, make-up room, dressing rooms with lockers and showers, and a spacious Dance Studio.

Major Requirements (B.A.)

The Theatre Arts major consists of 75-106 units, depending upon whether or not students choose an option. The Theatre Arts major without an option consists of 75 units. The B.A. degree requires a total of 180 units.

I. Beginning Electives (16 units)

Complete three show assignments (6 units) in the first two years as follows: three Production and Performance courses (THEA 1490 through THEA 1499 and THEA 2490 through 2499) as defined by the Subject Area Course List.

Complete ten units in ONE of the following areas of emphasis: Dance, Acting, or Technology and Design. Unless specified, courses should be numbered below 2999, and listed in the Subject Area Course List.

A. Dance (10 units)

Five Beginning or Intermediate dance technique courses (5) (Limited to Ballet, Hip Hop, Modern, Musical Theatre, or Jazz)

One course (2 units) from:

- THEA 2061 - Musical Theatre Show Choir A *Units: 2*
- THEA 2062 - Musical Theatre Show Choir B *Units: 2*
- THEA 2063 - Musical Theatre Show Choir C *Units: 2*

Three technology and design courses (3 units) from:

- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2424 - Fundamental Backstage Technology: Sound: Recording *Units: 1*

B. Acting (10 units)

- THEA 2031 - Stage Voice A *Units: 1*
- THEA 2032 - Stage Voice B *Units: 1*

One course (2 units) from:

- THEA 2061 - Musical Theatre Show Choir A *Units: 2*
- THEA 2062 - Musical Theatre Show Choir B *Units: 2*
- THEA 2063 - Musical Theatre Show Choir C *Units: 2*

At least three (3) units from:

- DANC 1191 - Beginning Technique Classes: Beginning Ballet Dance I *Units: 1*
- DANC 1192 - Beginning Technique Classes: Beginning Ballet Dance II *Units: 1*
- DANC 1193 - Beginning Technique Classes: Beginning Ballet Dance III *Units: 1*
- DANC 2120 - Musical Theatre Dance A *Units: 2*
- DANC 2121 - Musical Theatre Dance B *Units: 2*
- DANC 2122 - Musical Theatre Dance C *Units: 2*
- DANC 2123 - Musical Theatre Dance D *Units: 2*
- DANC 2124 - Musical Theatre Dance E *Units: 2*
- DANC 2125 - Musical Theatre Dance F *Units: 2*

Three technology and design courses (3 units) from:

- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2428 - Fundamental Backstage Technology: Sound: PA *Units: 1*

C. Technology and Design (10 units)

- THEA 1020 - Discover Acting *Units: 3*

Five technology and design courses (5 units) from:

- THEA 2421 - Fundamental Backstage Technology: Wood Scenery: Walls and Levels *Units: 1*
- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2424 - Fundamental Backstage Technology: Sound: Recording *Units: 1*
- THEA 2425 - Fundamental Backstage Technology: Stage Effects *Units: 1*
- THEA 2428 - Fundamental Backstage Technology: Sound: PA *Units: 1*
- THEA 2429 - Fundamental Backstage Technology: Practical Drafting and Model Building *Units: 1*
- THEA 2430 - Fundamental Backstage Technology: Practical Make-up *Units: 1*
- THEA 2431 Fundamental Backstage Technology

Two (2) units from:

- DANC 1191 - Beginning Technique Classes: Beginning Ballet Dance I *Units: 1*
- DANC 1192 - Beginning Technique Classes: Beginning Ballet Dance II *Units: 1*
- DANC 1193 - Beginning Technique Classes: Beginning Ballet Dance III *Units: 1*
- DANC 1141 - Beginning Technique Classes: Beginning Modern Dance I *Units: 1*
- DANC 1142 - Beginning Technique Classes: Beginning Modern Dance II *Units: 1*
- DANC 1143 - Beginning Technique Classes: Beginning Modern Dance III *Units: 1*

II. Common Core (30 units)

One lower division THEA or DANC course (see the Subject Area Course List (SACL) (4)

- DANC 3251 - Movement Analysis *Units: 4*
- DANC 3252 - Dance Through the Ages *Units: 4*
- THEA 3253 - Theatre Through the Ages *Units: 4*
- THEA 3254 - Scenery, Lights, and Sound Concepts *Units: 4*
- THEA 3255 - Costumes and Makeup Concepts *Units: 4*
- THEA 3256 - Directing: Text to Stage *Units: 3*
- THEA 3257 - Design for Stage *Units: 3*

III. Advanced Electives (19 units)

Theatre History and Literature Elective (4 units)

One additional course in Theatre History and Literature (or) Dance History. Students who intend to complete the Dance Option should take DANC 4201.

Advanced Technique Elective (6 units)

Two additional courses in advanced technique. Take courses numbered 3000 or above in ONE area of emphasis: Acting, Dance, or Technology and Design.

Production and Performance (9 units)

At least three Production and Performance courses, numbered 3000 and above, covering at least three show assignments during the final two years.

IV. Culmination and Assessment (10 units)

Each student must complete a Senior Culmination Project to include either a performance project in the Senior Festival, a written thesis, or a substantial internship. Students may substitute internship credit or thesis-related Independent Study credit for their Senior Festival courses.

- THEA 4151 - Senior Festival Preproduction *Units: 3*
- THEA 4152 - Senior Festival Performance *Units: 3*
- THEA 4155 - Career Management Issues in Theatre Arts *Units: 4*

Options (13-31 units)

An Option is not required. Options provide the opportunity to explore a specialized mode of theatre arts beyond the level of the basic emphasis required to graduate. Options allow sufficient depth of study to prepare for graduate school or entry-level work in a semi-professional company and involve additional work beyond the major requirements listed above. The department's graduates have found work in professional nonprofit companies after completing an internship as part of their CSUEB program. The additional work required for an option will prove useful in obtaining a quality internship or graduate school placement, so we recommend that students complete most of their option before seeking an internship. Acceptable courses are listed in the Subject Area Course List.

Technology and Design Option (20-22 units)

Total major units with this option: 95-97

History and Literature (4 units)

- Complete a third course in Theatre History and Literature *Units: 4*

Foundational Technique (2 units)

- Complete two additional Technology and Design courses, numbered 2999 and below *Units: 2*

Advanced Technique (8 units)

- Complete two additional Technology and Design courses, numbered 3000 or above *Units: 8*

Production and Performance (6-8 units)

- Complete two additional Production and Performance assignments *Units: 6-8*. Selections must be approved by the chair and advisor in advance.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation which are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Subject Area Course Lists (SACL)

Common Core-acceptable Lower Division Courses

Four-year CSUEB students should take any THEA or DANC course in a First Year General Education Cluster. Transfer students may petition the Chair to substitute a course with the following types of content: a theatre literature and history course with required reading of at least six plays, a performance appreciation course that required attendance and a review of at least four shows, a script analysis course, or a creative methods course (specifically any course that articulates with DANC 1200). Transfer students may also meet the requirement with one of the courses approved for four-year students. Substitutes require advanced approval of the Chair.

Acting

- THEA 2031 - Stage Voice A *Units: 1*
- THEA 2032 - Stage Voice B *Units: 1*
- THEA 2035 - Fundamentals of Acting *Units: 3*
- THEA 2037 - Acting 20th Century Drama and Diversity *Units: 3*
- THEA 2055 - Intermediate Acting I *Units: 2*
- THEA 2061 - Musical Theatre Show Choir A *Units: 2*
- THEA 2062 - Musical Theatre Show Choir B *Units: 2*
- THEA 2063 - Musical Theatre Show Choir C *Units: 2*
- THEA 3052 - Acting for the Camera *Units: 4*
- THEA 3056 - Intermediate Acting II *Units: 2*
- THEA 3057 - Intermediate Acting III *Units: 2*
- THEA 3064 - Audition Techniques and Talent Analysis I *Units: 1*
- THEA 3065 - Audition Techniques and Talent Analysis II *Units: 1*
- THEA 4032 - Period Acting Style: Restoration and Moliere *Units: 3*
- THEA 4034 - Period Acting Style: Shakespeare *Units: 3*
- THEA 4038 - Acting Studio I *Units: 3*
- THEA 4039 - Acting Studio II *Units: 3*

Dance

Fundamental Courses

- DANC 2020 - Rhythm and Music for Dance *Units: 2*
- DANC 2341 - Improvisation in Art and Life *Units: 2*
- DANC 2342 - Integrating Theatre and Dance *Units: 2*
- DANC 2343 - Body and Mind Training for Performance *Units: 2*
- DANC 2344 - Site Specific Performance *Units: 2*

Beginning Technique Courses

- DANC 1131 - Beginning Technique Classes: Beginning Hip Hop Dance I *Units: 1*
- DANC 1132 - Beginning Technique Classes: Beginning Hip Hop Dance II *Units: 1*
- DANC 1133 - Beginning Technique Classes: Beginning Hip Hop Dance III *Units: 1*
- DANC 1141 - Beginning Technique Classes: Beginning Modern Dance I *Units: 1*
- DANC 1142 - Beginning Technique Classes: Beginning Modern Dance II *Units: 1*
- DANC 1143 - Beginning Technique Classes: Beginning Modern Dance III *Units: 1*
- DANC 1171 - Beginning Technique Classes: Beginning Jazz Dance I *Units: 1*
- DANC 1172 - Beginning Technique Classes: Beginning Jazz Dance II *Units: 1*
- DANC 1173 - Beginning Technique Classes: Beginning Jazz Dance III *Units: 1*
- DANC 1191 - Beginning Technique Classes: Beginning Ballet Dance I *Units: 1*
- DANC 1192 - Beginning Technique Classes: Beginning Ballet Dance II *Units: 1*
- DANC 1193 - Beginning Technique Classes: Beginning Ballet Dance III *Units: 1*

Intermediate Technique Courses

- DANC 2131 - Intermediate Technique Classes: Intermediate Hip Hop Dance I *Units: 1*
- DANC 2132 - Intermediate Technique Classes: Intermediate Hip Hop Dance II *Units: 1*
- DANC 2133 - Intermediate Hip Hop Dance III
- DANC 2141 - Intermediate Technique Classes: Intermediate Modern Dance I *Units: 1*
- DANC 2171 - Intermediate Technique Classes: Intermediate Jazz Dance I *Units: 1*
- DANC 2172 - Intermediate Technique Classes: Intermediate Jazz Dance II *Units: 1*
- DANC 2173 - Intermediate Technique Classes: Intermediate Jazz Dance III *Units: 1*
- DANC 2191 - Intermediate Technique Classes: Intermediate Ballet Dance I *Units: 1*
- DANC 2192 - Intermediate Technique Classes: Intermediate Ballet Dance II *Units: 1*
- DANC 2193 - Intermediate Technique Classes: Intermediate Ballet Dance III *Units: 1*

Advanced Technique Courses

- DANC 4141 - Advanced Dance Technique Courses: Advanced Modern Dance I *Units: 2*
- DANC 4142 - Advanced Dance Technique Courses: Advanced Modern Dance II *Units: 2*
- DANC 4143 - Advanced Dance Technique Courses: Advanced Modern Dance III *Units: 2*
- DANC 4171 - Advanced Dance Technique Courses: Advanced Jazz Dance I *Units: 2*
- DANC 4172 - Advanced Dance Technique Courses: Advanced Jazz Dance II *Units: 2*
- DANC 4173 - Advanced Dance Technique Courses: Advanced Jazz Dance I *Units: 2*
- DANC 4191 - Advanced Dance Technique Courses: Advanced/Intermediate Ballet Dance I *Units: 2*
- DANC 4192 - Advanced Dance Technique Courses: Advanced/Intermediate Ballet Dance II *Units: 2*
- DANC 4193 - Advanced Dance Technique Courses: Advanced/Intermediate Ballet Dance III *Units: 2*

Dance History Course

- DANC 4201 - Dance in Modern Society *Units: 4*

Musical Theatre

- THEA 2044 - Fundamental Musical Theatre Techniques *Units: 3*
- THEA 2045 - Applied Singing for Musical Theatre A *Units: 1*
- THEA 2046 - Applied Singing for Musical Theatre B *Units: 1*
- THEA 2047 - Applied Singing for Musical Theatre C *Units: 1*
- THEA 2062 - Musical Theatre Show Choir B *Units: 2*
- THEA 2063 - Musical Theatre Show Choir C *Units: 2*
- THEA 3041 - Advanced Applied Singing for Musical Theatre I *Units: 1*
- THEA 3042 - Advanced Applied Singing for Musical Theatre II *Units: 1*

- THEA 3043 - Advanced Applied Singing for Musical Theatre III *Units: 1*
- THEA 3048 - Musical Theatre Technique I *Units: 3*
- THEA 3049 - Musical Theatre Technique II *Units: 3*
- THEA 3216 - History of Musical Theatre *Units: 4*
- THEA 4040 - Musical Theatre Journal Review *Units: 1*
- THEA 4048 - Advanced Musical Ensemble A *Units: 3*
- THEA 4049 - Advanced Musical Ensemble B *Units: 3*
- DANC 2121 - Musical Theatre Dance B *Units: 2*
- DANC 2122 - Musical Theatre Dance C *Units: 2*
- DANC 2123 - Musical Theatre Dance D *Units: 2*
- DANC 2124 - Musical Theatre Dance E *Units: 2*
- DANC 2125 - Musical Theatre Dance F *Units: 2*

Production and Performance

- THEA 1490 - Theatre Production Activity Courses: Costume or Backstage Activity A *Units: 2*
- THEA 2490 - Theatre Production Activity Courses: Costume or Backstage Activity B *Units: 2*
- THEA 3490 - Theatre Production Activity Courses: Costume or Backstage Activity C *Units: 2*
- THEA 4490 - Theatre Production Activity Courses: Costume or Backstage Activity D *Units: 2*
- THEA 1491 - Theatre Production Activity Courses: Musical Theatre Production A *Units: 4*
- THEA 2491 - Theatre Production Activity Courses: Musical Theatre Production B *Units: 4*
- THEA 3491 - Theatre Production Activity Courses: Musical Theatre Production C *Units: 4*
- THEA 4491 - Theatre Production Activity Courses: Musical Theatre Production D *Units: 4*
- THEA 1492 - Theatre Production Activity Courses: Stage Crew Activity A *Units: 2*
- THEA 2492 - Theatre Production Activity Courses: Stage Crew Activity B *Units: 2*
- THEA 3492 - Theatre Production Activity Courses: Stage Crew Activity C *Units: 2*
- THEA 4492 - Theatre Production Activity Courses: Stage Crew Activity D *Units: 2*
- THEA 1493 - Theatre Production Activity Courses: Production Staff Activity A *Units: 3*
- THEA 2493 - Theatre Production Activity Courses: Production Staff Activity B *Units: 3*
- THEA 3493 - Theatre Production Activity Courses: Production Staff Activity C *Units: 3*
- THEA 4493 - Theatre Production Activity Courses: Production Staff Activity D *Units: 3*
- THEA 1494 - Theatre Production Activity Courses: Festival Activity A *Units: 2*
- THEA 2494 - Theatre Production Activity Courses: Festival Activity B *Units: 2*
- THEA 3494 - Theatre Production Activity Courses: Festival Activity C *Units: 2*
- THEA 4494 - Theatre Production Activity Courses: Festival Activity D *Units: 2*
- THEA 1495 - Theatre Production Activity Courses: Studio Production Activity A *Units: 4*
- THEA 2495 - Theatre Production Activity Courses: Studio Production Activity B *Units: 4*
- THEA 3495 - Theatre Production Activity Courses: Studio Production Activity C *Units: 4*
- THEA 4495 - Theatre Production Activity Courses: Studio Production Activity D *Units: 4*
- THEA 1497 - Theatre Production Activity Courses: Special Workshop or Production A *Units: 1-12*
- THEA 2497 - Theatre Production Activity Courses: Special Workshop or Production B *Units: 1-12*
- THEA 3497 - Theatre Production Activity Courses: Special Workshop or Production C *Units: 1-12*
- THEA 4497 - Theatre Production Activity Courses: Special Workshop or Production D *Units: 1-12*
- THEA 1499 - Theatre Production Activity Courses: Production Practicum A *Units: 4*
- THEA 2499 - Theatre Production Activity Courses: Production Practicum B *Units: 4*
- THEA 3499 - Theatre Production Activity Courses: Production Practicum C *Units: 4*
- THEA 4499 - Theatre Production Activity Courses: Production Practicum D *Units: 4*

Technology and Design

Foundation Technique Courses

- THEA 2421 - Fundamental Backstage Technology: Wood Scenery: Walls and Levels *Units: 1*
- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2424 - Fundamental Backstage Technology: Sound: Recording *Units: 1*
- THEA 2425 - Fundamental Backstage Technology: Stage Effects *Units: 1*
- THEA 2428 - Fundamental Backstage Technology: Sound: PA *Units: 1*
- THEA 2430 - Fundamental Backstage Technology: Practical Make-up *Units: 1*
- THEA 2450 - Vectorworks CADD for Lights and Scenery *Units: 1*

Advanced Technique Courses

- THEA 3422 - History of Costume *Units: 4*
- THEA 3423 - Non-Western Costume *Units: 4*
- THEA 3424 - Scene Painting and Graphic Language *Units: 4*
- THEA 3426 - The Art of the Kimono *Units: 4*
- THEA 3427 - Fashion History *Units: 4*
- THEA 3428 - Fashion Design *Units: 4*
- THEA 4418 - Advanced Makeup and Maskmaking *Units: 2*

Undeclared Major

Undeclared Major

- Department Information
- Introduction
- Advising
- Choosing a Major

Department Information

Academic Advising and Career Education
 Student Services and Administration Building, 2nd Floor
 Phone: (510) 885-3621
 Fax: (510) 885-2398

Director: Lawrence Bliss

Introduction

Academic Advising and Career Education (AACE) is the academic advising home for undergraduate students who have not yet declared a major at California State University, East Bay. It is common for students to explore their interests, major areas of study and career options during their first two years of college. We encourage students to meet with an AACE counselor on an ongoing basis throughout their research. We are here to support student exploration and guide them through the process of declaring a major. Research indicates that students often change their majors one or more times before completing their degrees.

Advising

Academic advising is important for the long-term academic success of all students. AACE provides students with individualized advising appointments to assist them in choosing a major, selecting courses, making progress toward a degree, and understanding academic policies and procedures. Undeclared students should concentrate on satisfying their General Education requirements until a major is selected. Students should keep in mind, however, that no course with the same prefix as their declared major may be applied to General Education requirements, with the

exceptions noted in the B.A./B.S. Degree Requirements chapter. Courses that cannot be used to fulfill G.E. requirements are normally applicable to the major, so nothing has been lost.

Choosing a Major

AACE provides a variety of resources and knowledgeable staff to help students make well informed decisions about major and career options. AACE Counselors encourage students to research the available majors by consulting the University Catalog, speaking with faculty, staff and/or advisors in major departments, and enrolling in introductory courses offered in the major programs of interest.

Undeclared students should consider all possibilities, as most major programs may not prepare students for a specific job, but instead will get them ready for the job market by developing transferable skills. AACE provides additional resources which include self-assessment testing to better understand personal interest, values, and abilities; and a career library to aid research on majors and careers. AACE counselors are also available to assist students narrow down the focus on majors that lead to specific careers.

It is important for undeclared majors to understand that choosing a major is a process. Students must actively pursue experiences that will give them the information they need to choose their major. Also, choosing a major and a career are not the same thing. Many college graduates are employed in fields not directly related to their majors, and most people change careers more than once in their lifetime. Remember, the ultimate goal is graduation in a major and AACE counselors are available to help students complete the process.

Minor

Advertising Minor

Advertising

Department of Marketing and Entrepreneurship
College of Business and Economics
Office: Valley Business & Technology Bldg., Rm. 440
Phone: (510) 885-3326

Department of Communication
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall, Room 3011
Phone: (510) 885-3292

Advisor: C. Joanna Lee (Marketing and Entrepreneurship, CBE), Ph.D. University of Texas at Austin

Program Information

The Advertising Minor allows students to integrate an interdisciplinary set of advertising-related courses with their own major and their general education requirements. This may be an attractive specialization for students in such majors as business, communication, art, or psychology.

Careers in advertising include positions with advertising agencies in account supervision, copywriting, production, traffic, marketing and media research, and media buying.

Students with advertising skills are also in demand for the advertising and public relations departments of corporations and not-for-profit organizations, in radio, television, newspapers and magazines, and in specialty firms such as direct mail, outdoor and new media advertising, marketing research agencies, production shops, and syndicated data services.

Students in the Advertising Minor are urged to complete some of the listed elective courses and, in particular, to seek out co-op education or internship placements during their junior and senior years. Practical working experience is available through active participation in The Advertising Agency, which serves The Pioneer within the Department of Communication (Undergraduate).

Minor Requirements (47 units)

Students must have completed the prerequisites listed in the course description for any course they use to satisfy the following requirements.

(Communication majors may use all 47 units for their major and/or G.E. requirements; Business Administration majors may use 39 of the 47; Sociology majors, 31 of the 47; and English and Psychology majors, 27 of the 47 units.)

- COMM 3340 - Graphic Communication *Units: 4*
- COMM 4520 - Advertising Form and Function *Units: 4*
- COMM 4530 - The Advertising/Public Relations Campaign *Units: 4*

- ENGL 2005 - Grammar for Writers *Units: 4*
or
- ENGL 3005 - Study of Language *Units: 4*

- MKTG 3401 - Marketing Principles *Units: 4*
- MKTG 3410 - Advertising Management *Units: 4*

- MKTG 3445 - Marketing Research *Units: 4*
or
- SOC 4111 - Methods of Sociological Research I *Units: 4*

- MKTG 4412 - Media Planning *Units: 4*
or
- COMM 3100 - Introduction to Professional Video Production *Units: 4*

- PSYC 1000 - General Psychology *Units: 5*
or
- PSYC 1001 - General Psychology and Society *Units: 5*
or
- PSYC 1005 - General Psychology for Healthier Living *Units: 5*

- STAT 1000 - Elements of Probability and Statistics *Units: 5*
or
- STAT 2010 - Elements of Statistics for Business and Economics *Units: 5*

- An advisor-approved Art activity course *Units: 5*

Strongly Recommended

- PSYC 1100 - Critical Thinking in Psychology *Units: 4*

- PSYC 3510 - Attitudes and Opinions *Units:4*
or
- PSYC 4740 - Psycholinguistics *Units: 4*

- Co-op Ed or internship experiences in advertising and/or public relations *Units: 4-8*

Additional Electives Relevant to the Minor

- ACCT 2251 - Introduction to Financial Accounting *Units: 4*

- ART 3600 - Digital Photography II *Units: 4*
or
- COMM 3600 - Digital Photography II *Units: 4*

- ART 4600 - Image and Idea *Units: 4*

or

- COMM 4600 - Image and Idea *Units: 4*
- COMM 4510 - Public Relations Theory and Practice *Units: 4*
- MKTG 3425 - Promotion *Units: 4*
- MKTG 4415 - Corporate Communications *Units: 4*
- SOC 1000 - Introduction to Sociology *Units: 4*

African American Studies Minor

Minor Requirements (24 units)

The African American Studies minor offers the student majoring in another discipline the opportunity to obtain knowledge and understanding of America's largest racial minority and its relationship to the larger society. Students considering careers in teaching, government service, foreign affairs, business, health-science related fields, and law may find the minor compatible.

I. Lower Division (8 units)

Two lower-division courses in African American studies selected from the following:

- ES 1001 - Introduction to Ethnic Studies *Units: 4*
- ES 2175 - Hip Hop Nation *Units: 4*
- ES 2300 - The Black Cinematic Tradition *Units: 4*

II. Upper Division (16 units)

- ES 3889 - Engaging Communities of Color *Units: 4*

And any Twelve (12) additional upper-division units

And any Twelve (12) additional upper-division units in African American studies, selected in consultation with an Ethnic Studies advisor:

- ES 3889 - Engaging Communities of Color *Units: 4*
 - ES 3105 - African American Identity *Units: 4*
 - ES 3120 - The Civil Rights Movement *Units: 4*
 - ES 3130 - Slavery in the Americas *Units: 4*
 - ES 3140 - Racism and Sports *Units: 4*
 - ES 3145 - African American Music *Units: 4*
 - ES 3146 - Jazz on Film *Units: 4*
 - ES 3165 - African American Sexuality *Units: 4*
 - ES 3190 - Internationalist Worldview of Malcolm X *Units: 4*
 - ES 3230 - Oral Traditions *Units: 4*
 - ES 3303 - Contemporary African American Women Writers *Units: 4*
 - ES 3720 - James Baldwin *Units: 4*
 - ES 3700 - Special Topics in Ethnic Studies *Units: 4*
 - ES 3999 - Issues in Ethnic Studies *Units: 4*
 - ES 4900 - Independent Study *Units: 4*

 - ES 3691 - Black Literature I *Units: 4*
- or
- ENGL 3691 - Black Literature I *Units: 4*

 - HIST 3567 - African American History *Units: 4*

or

- ES 3567 - African American History Units: 4
- SOC 3415 - Sociology of the African American Family *Units: 4*

American Indian Studies Minor

Minor Requirements (24 units)

The American Indian Studies minor offers the student majoring in another discipline the opportunity to acquire knowledge and understanding of the original peoples of the United States as well as the entire Western Hemisphere and Pacific. This academic minor addresses historical, political, cultural, and intellectual issues of Native nations, providing an interdisciplinary basis for understanding the historical and contemporary problems not only of Native peoples, but of the United States as a colonial and military power.

I. Core Courses (12 units)

Lower Division (8 units)

Two lower-division courses in Ethnic Studies or Asian American studies selected from the following:

- ES 1001 - Introduction to Ethnic Studies *Units: 4*
- ES 2320 - American Indian Oral Literature *Units: 4*
- ES 2400 - Introduction to American Indian Studies *Units: 4*

Upper Division (4 units)

- ES 3889 - Engaging Communities of Color *Units: 4*

II. Electives (12 units)

Select 3 courses from the following:

- ANTH 3500 - North American Indians *Units: 4*
- ES 3230 - Oral Traditions *Units: 4*
- ES 3305 - Contemporary American Indian Life *Units: 4*
- ES 3310 - God is Red: American Indian World View *Units: 4*
- ES 3330 - American Indian Revitalization Movements *Units: 4*
- ES 3800 - Peoples of Central America *Units: 4*
- ES 3700 - Special Topics in Ethnic Studies *Units: 4*
- ES 3999 - Issues in Ethnic Studies *Units: 4*
- ES 4900 - Independent Study *Units: 4*

Anthropology Minor

Minor Requirements (28 units)

The minor requires twenty-eight (28) units in Anthropology to be taken in approximately the following order:

A. One course in:

- ANTH 1000 - Introduction to Anthropology *Units: 4*

B. One of the following:

- ANTH 1100 - Introduction to Biological Anthropology *Units: 4*
- ANTH 1200 - Introduction to Archaeology *Units: 4*
- ANTH 1300 - Introduction to Cultural Anthropology *Units: 4*
- ANTH 3000 - Anthropology in the Modern World *Units: 4* may be substituted

C. Two of the following:

- ANTH 3100 - Human Evolution I *Units: 4*
or
- ANTH 3101 - Human Evolution II *Units: 4*
- ANTH 3200 - Science in Archaeology *Units: 4*
- ANTH 3400 - Social Anthropology *Units: 4*
- ANTH 3800 - Language and Culture *Units: 4*

D. One course in:

- 3500 series (regional ethnography) *Units: 4*

E. Two additional courses:

- 3000- and/or 4000-level courses (excluding 3500 series) *Units: 8*

Art History Minor

Minor Requirements (36 units)

- ART 1020 - The Creative Process *Units: 4*
- ART 2630 - Digital Photography I *Units: 4*
- ART 3035 - Modern Art *Units: 4*
- ART 3411 - Advanced Survey of World Art *Units: 4*
- Five 3000/4000-level art history courses (20 units total) selected with an academic advisor.

Art Studio Minor

Minor Requirements (36 units)

- ART 1020 - The Creative Process *Units: 4*
- ART 1113 - Drawing I *Units: 4*
- ART 3411 - Advanced Survey of World Art *Units: 4*
- Two lower division art studio courses selected with an advisor *Units: 8*
- Twelve units of upper division art studio courses selected with an advisor *Units: 12*
- One upper division Art History course *Units: 4*

Asian American Studies Minor

Minor Requirements (24 units)

The Asian American Studies minor offers the student majoring in another discipline the opportunity to acquire knowledge and understanding of one of the major ethnic groups in the United States and its developing relationship to the larger society. Students considering careers in teaching, government service, foreign affairs, business, health-sciences related fields and law may find the minor compatible with their career goals.

I. Core Courses (8 units)

Lower Division (4 units)

One lower-division course in Ethnic Studies or Asian American studies selected from the following:

- ES 1001 - Introduction to Ethnic Studies *Units: 4*
- ES 2500 - Introduction to Asian American Studies *Units: 4*

Upper Division (4 units)

- ES 3889 - Engaging Communities of Color *Units: 4*

II. Electives (16 units)

Four courses selected from the following:

- ES 3030 - Immigrant and Refugee Women *Units: 4*
- ES 3552 - The Chinese Experience in the United States *Units: 4*
- ES 3555 - Asian American Family Patterns *Units: 4*
- ES 3556 - Concentration Camps, U.S.A. *Units: 4*
- ES 3557 - Asian American Film Festival *Units: 4*
- ES 3600 - Presumed Guilty: Asian Americans and the Post-9/11 Racialized State *Units: 4*
- ES 3610 - South Asian American Experience *Units: 4*
- ES 3230 - Oral Traditions *Units: 4*
- ES 3500 - The Afghan Diaspora *Units: 4*
- ES 3700 - Special Topics in Ethnic Studies *Units: 4*
- ES 3999 - Issues in Ethnic Studies *Units: 4*
- ES 4900 - Independent Study *Units: 4*
- ENGL 3670 - Asian/Filipino American Literature *Units: 4*

Asian Studies Minor

Program Description

All students are invited to include some courses on Asia in their programs in order to enhance their critical understanding of the West's interrelatedness with the regions where half of humanity lives. The Asian countries are steeped in traditions that have elaborated different possibilities than those with which many Americans are acquainted. The Asian peoples have liberated themselves from Western rule and they are trying to establish equal relations with the West, while they work to come to terms with science, technology, and democracy in their own countries.

The Asian Studies faculty, in cooperation with Asian American student groups and concerned community members, attempt to encourage mutual understanding of East and West through regular courses in various departments (see following list); through new courses listed in the Class Schedule and Independent Study; through occasional workshops, lectures, and cultural events; and through outreach work in the Bay Area schools. The program is supplemented with topics such as Yoga, Judo, and Karate (Kinesiology and Physical Education). Notice also that certain general courses in the curriculum include a major Asian component: for example, Mankind and Food, Folklore (Anthropology), International Finance and Trade (Economics), Nutrition and Diet Therapy (Health Sciences), Multinational Business (Management Sciences), International Marketing (Marketing), International Relations and Contemporary World Problems (Political Science), and World Development (Sociology), among others. The Asian Studies Program faculty publicizes these and related matters. Study abroad courses, as well as short educational tours, have been offered in several Asian countries.

Minor Requirements (32 units)

Students with broader interests in Asia can build into their curriculum a Minor in Asian Studies consisting of eight courses (32 units). The minor is designed to complement the student's major by grouping courses taken as part of the major, courses taken to fulfill General Education requirements, and free electives into a package emphasizing Asia. A minimum of 18 units must be taken outside the student's major.

Although the Minor in Asian Studies does not include a foreign language requirement, one year of an Asian language may be counted toward fulfillment of the minor requirements. Students wishing to go on to graduate school in Asian Studies are strongly encouraged to begin their language study as part of their undergraduate training. Mandarin Chinese, Japanese, Vietnamese and Filipino are offered on campus.

It is also possible to include courses taken at the universities that are associated with the International Programs of the California State University system; these opportunities presently exist in China, Japan, Korea and Taiwan and others are being considered.

Thirty-two units (eight courses) may be chosen from the following list. No more than 12 units (three courses) in one department. At least 12 upper division units are required.

- ANTH 3545 - China *Units: 4*
- ANTH 3550 - Japan *Units: 4*
- GEOG 3540 - China and Japan *Units: 4*
- GEOG 3550 - Geography of Southeast Asia *Units: 4*
- HIST 3301 - Modern Asia *Units: 4*
- HIST 3311 - Traditional China *Units: 4*
- HIST 3312 - Modern China *Units: 4*
- HIST 3313 - People's Republic of China *Units: 4*
- HIST 3322 - Early Japan *Units: 4*
- HIST 3325 - Postwar Japan *Units: 4*
- MLL 1601 - Elementary Mandarin Chinese I *Units: 4*
- MLL 1602 - Elementary Mandarin Chinese II *Units: 4*
- MLL 1603 - Elementary Mandarin Chinese III *Units: 4*
- MLL 1651 - Elementary Filipino I *Units: 4*
- MLL 1652 - Elementary Filipino II *Units: 4*
- MLL 1653 - Elementary Filipino III *Units: 4*
- MLL 1751 - Elementary Vietnamese I *Units: 4*
- MLL 1752 - Elementary Vietnamese II *Units: 4*
- MLL 1753 - Elementary Vietnamese III *Units: 4*
- MLL 1801 - Elementary Japanese I *Units: 4*
- MLL 1802 - Elementary Japanese II *Units: 4*
- MLL 1803 - Elementary Japanese III *Units: 4*
- MLL 2831 - Asian Thought *Units: 4*
- PHIL 1401 - Religions of the World *Units: 4*
- PHIL 2605 - Introduction to Asian Religion *Units: 4*
- PHIL 3403 - Religions of the East *Units: 4*
- PHIL 3410 - Comparative Themes in Eastern and Western Philosophy *Units: 4*
- POSC 3204 - Political Systems of Asia *Units: 4*

Although not part of the courses that count in the minor, Asian courses in Kinesiology and Physical Education are a much appreciated supplement to the Asian Studies program. Yoga, Judo, and Karate combine the wisdom of the body with self-understanding, and enhance learning skills, general alertness, and fitness.

Biological Science Minor

Minor Requirements (35-37 units)

The minor program is designed to provide students in other majors the opportunity to broaden their experience and understanding of the biological sciences, and it may expand their educational and employment opportunities. The minor consists of 35-37 units.

- CHEM 1100 - Introduction to College Chemistry *Units: 5*
or
- CHEM 1601 - Basic Chemistry for the Health Sciences *Units: 4*
or
- CHEM 1605 - Basic Chemistry for Healthier Living *Units: 4*

- BIOL 1401 - Molecular and Cellular Biology *Units: 5*
- BIOL 1402 - Plant Biology *Units: 5*
- BIOL 1403 - Animal Biology *Units: 5*

- BIOL 3020 - Genetics, Evolution, and Humanity *Units: 4*
or
- BIOL 3121 - Principles of Genetics *Units: 5*

- Upper division Biology electives *Units: 12* [can include BIOL 2010 (or BIOL 2011) or BIOL 2020]

Biostatistics Minor

Minor Requirements (24 units)

The minor consists of 24 units. Note that some courses require prerequisites not required in the minor.

Required Courses (16 units)

- STAT 3031 - Statistical Methods in Biology *Units: 4*
- STAT 4000 - Analysis of Variance in the Behavioral Sciences *Units: 4*
or
- STAT 3502 - Statistical Inference I *Units: 4*
- STAT 3503 - Statistical Inference II *Units: 4*
(second sequence is preferred; however, it requires calculus.)

- STAT 4601 - Regression *Units: 4*
- STAT 4950 - Advanced Statistical Packages for Data Analysis *Units: 4*

Elective courses (8 units)

Two upper division courses in statistics not included in required coursework.

Business Administration Minor

Minor Requirements (36-44 units)

Note: Students must have completed the prerequisites listed in the course description for any course they use to satisfy the following requirements.

Complete Alternative A or B

Alternative A

I. Lower Division (16 units)

- ACCT 2251 - Introduction to Financial Accounting *Units: 4*
- ACCT 2701 - Legal Environment of Business *Units: 4*
- ECON 2301 - Principles of Microeconomics *Units: 4*
- ECON 2302 - Principles of Macroeconomics *Units: 4*

II. Upper Division (20 units)

Students must have completed the prerequisites listed in the course description for any course they select to satisfy the following requirements.

- MGMT 3600 - Theories of Management *Units: 4*
- MKTG 3401 - Marketing Principles *Units: 4*
- ITM 3060 - Information Technology Management *Units: 4*

Two courses from:

- ACCT 4911 - Accounting Ethics *Units: 4*
- ECON 3107 - Global Economic Analysis *Units: 4*
- ECON 3551 - Managerial Economics and Business Strategy *Units: 4*
- FIN 3300 - Financial Management *Units: 4*
- MGMT 3100 - Decision Science *Units: 4*
- MGMT 3614 - Organizational Behavior *Units: 4*
- MGMT 3620 - Operations Management *Units: 4*
- MGMT 4500 - Business, Government, and Society *Units: 4*
- MGMT 4670 - Multinational Business *Units: 4*

Note:

Business Administration courses are those with Accounting, Entrepreneurship, Finance, Information Technology Management, Management and Marketing prefixes. Courses in Economics cannot be included in these 8 units.

Alternative B

I. Lower Division (16 units)

- ACCT 2251 - Introduction to Financial Accounting *Units: 4*
- ACCT 2701 - Legal Environment of Business *Units: 4*
- CS 1160 - Introduction to Computer Science I *Units: 4* (or any other introductory course in computer programming)
- ECON 2301 - Principles of Microeconomics *Units: 4*

II. Upper Division (28 units)

Students must have completed the prerequisites listed in the course description for any course they select to satisfy the following requirements.

- ACCT 2253 - Introduction to Managerial Accounting *Units: 4*
or
- ENGR 3090 - Industrial Costs and Controls *Units: 4*
- Four (4) units of ITM upper division coursework, with consent of department
- INDE 3140 - Engineering Economy *Units: 4*
or
- ECON 2302 - Principles of Macroeconomics *Units: 4*
- MGMT 3614 - Organizational Behavior *Units: 4*

- MKTG 3401 - Marketing Principles *Units: 4*

Any two additional upper division Business Administration courses in the core as listed below (8):

- ECON 3107 - Global Economic Analysis *Units: 4*
or
- MGMT 4670 - Multinational Business *Units: 4*
- ECON 3551 - Managerial Economics and Business Strategy *Units: 4*
- FIN 3300 - Financial Management *Units: 4*
- MGMT 4500 - Business, Government, and Society *Units: 4*
or
- ACCT 4911 - Accounting Ethics *Units: 4*
- MKTG 3495 - Business Communication *Units: 4*

Note:

Students completing the Business Administration Minor with the intention of possibly changing to the Business Administration Major, completing a second bachelor's degree in Business Administration, or entering a master's program in Business Administration are urged to take these courses for a "letter grade" (not CR/NC) and discuss their selection of courses for the Business Administration Minor with an advisor in the College of Business and Economics Student Service Center. Such students, for example, should choose Alternative A to satisfy their lower division requirements. Engineering students completing this minor with the intention of entering the M.B.A. program should consult an advisor in the Department of Engineering.

California Studies Minor

Program Description

The California Studies Minor offers coursework on California with emphasis on the state's history, government, geography, ethnic diversity, and environment. Such a focus on California's diverse and sizable population, economic development, and geo-social regions will better prepare graduates to address the ongoing economic, demographic, and social evolution challenging California and its political institutions.

Minor Requirements (28-29 units)

The minor consists of 28-29 units. At least 18 of these units must be taken outside the student's major.

I. Core Requirements (20-21 units)

1. History

- HIST 3500 - History of California *Units: 4*

2. Politics

- POSC 3120 - State and Local Politics and Government *Units: 4*
or
- POSC 3150 - Politics of California *Units: 4*

3. Geography

- GEOG 3505 - Geography of California *Units: 4*

4. One course (4 units) on the California ethnic experience, selected from:

- ANTH 3505 - Indians of California *Units: 4*
- COMM 3400 - The Ethnic Media in America *Units: 4*
- ES 3210 - Latinas in the United States *Units: 4*
- ES 3805 - Latin American Immigration *Units: 4*
- ES 4290 - Latino Politics and Public Policy *Units: 4*
- HIST 3515 - Mexican Americans and the West *Units: 4*
- SOC 3416 - Sociology of the Mexican-American Family *Units: 4*¹

5. One course (4-5 units) on California environmental and scientific perspectives, selected from:

- ANTH 4240 - Data Analysis in Archaeology *Units: 4*¹
- ANTH 4250 - Field Course in Archaeology *Units: 5*¹
- BIOL 3210 - Woody Plants of California *Units: 4*¹
- BIOL 4200 - Plant Taxonomy *Units: 4*¹
- GEOG 4350 - Water Resources and Management *Units: 4*¹
- HIST 3505 - California Environmental History *Units: 4*
- POSC 4171 - Public Policy and the Environment *Units: 4*

II. Electives (8 units)

Any course listed above which was not taken in the core, or any course from the following list:

- ECON 3500 - Urban Economics *Units: 4*¹
- GEOG 3400 - Field Geography of the San Francisco Bay Region *Units: 4*¹
- GEOL 3100 - Geology of the Western National Parks *Units: 4*
- HIST 3503 - History of the San Francisco Bay Area *Units: 4*
- HIST 4032 - Introduction to Public History *Units: 4*
- POSC 3113 - Political Internship *Units: 2-4*
- POSC 3130 - Urban Politics *Units: 4*
- POSC 3310 - Political Parties and Campaigning *Units: 4*

Any Cooperative Education course with substantial content unique to California and approved in advance by a California Studies advisor.

Footnote

1. Has a prerequisite which is not applicable to the program.

Chemistry Minor

Minor Requirements (38-39 units)

Students majoring in other fields may wish to complete a coherent pattern of work in chemistry for the purpose of expanding their employment and educational opportunities. Students successfully completing this program will have the fact entered on their university records. The minor consists of 38-39 units.

- CHEM 1101 - General Chemistry *Units: 5*
- CHEM 1102 - General Chemistry *Units: 5*
- CHEM 1103 - General Chemistry *Units: 5*

- CHEM 2200 - Quantitative Analysis *Units: 5*
- CHEM 3301 - Organic Chemistry *Units: 5*
- CHEM 3302 - Organic Chemistry *Units: 5*
- CHEM 3303 - Organic Chemistry *Units: 5*

One of the following courses:

- CHEM 3400 - Introductory Biochemistry *Units: 4*
- CHEM 3501 - Biophysical Chemistry *Units: 4*
- CHEM 3511 - Physical Chemistry Lecture *Units: 3*
- CHEM 4411 - General Biochemistry *Units: 4*
- CHEM 4601 - Environmental Chemistry I *Units: 4*

Chinese Language and Cultural Studies Minor

Minor Requirements (32 units)

The minor consists of 32 units.

I. Required Courses (28 units):

1. Lower Division (12 units)

Note: Students who do not have proficiency at the intermediate level will need to take the first year of Mandarin Chinese: MLL 1601, MLL 1602, MLL 1603 (Elementary Chinese I, II, III) before starting the Intermediate Mandarin Chinese course series. This could add up to 12 additional units to the minor.

- MLL 2601 - Intermediate Mandarin Chinese I *Units: 4*
- MLL 2602 - Intermediate Mandarin Chinese II *Units: 4*
- MLL 2603 - Intermediate Mandarin Chinese III *Units: 4*

2. Upper Division (16 units)

Select four courses from the list below. At least two of the four courses must have the MLL prefix.

- ANTH 3545 - China *Units: 4*
- ES 3552 - The Chinese Experience in the United States *Units: 4*
- HIST 3311 - Traditional China *Units: 4*
- HIST 3312 - Modern China *Units: 4*
- HIST 3313 - People's Republic of China *Units: 4*
- MLL 3601 - Advanced Reading, Composition and Translation *Units: 4*
- MLL 3602 - Modern Chinese Literature, Linguistics and Culture *Units: 4*
- MLL 3603 - Classical Chinese Literature, Rhetoric and Culture *Units: 4*
- MLL 3612 - Modern Chinese Short Stories *Units: 4*
- MLL 4900 - Independent Study *Units: 1-4*

II. Electives (4 units)

Select one course from the list below (with consent of advisor).

- ANTH 3800 - Language and Culture *Units: 4*
- ENGL 3005 - Study of Language *Units: 4*

- ENGL 3670 - Asian/Filipino American Literature *Units: 4*
- ES 3551 - Asian American Women and Men *Units: 4*
- ES 3555 - Asian American Family Patterns *Units: 4*
- FIN 4375 - International Business Finance *Units: 4*
- GEOG 3540 - China and Japan *Units: 4*
- MGMT 4500 - Business, Government, and Society *Units: 4*
- MGMT 4670 - Multinational Business *Units: 4*
- MGMT 4675 - International Human Resources Management *Units: 4*
- MKTG 4470 - International Marketing *Units: 4*
- MKTG 4478 - International Business Projects *Units: 4*
- PHIL 3320 - Cultural Studies *Units: 4*
- PHIL 3403 - Religions of the East *Units: 4*
- POSC 3204 - Political Systems of Asia *Units: 4*
- POSC 3333 - Ethnic and Minority Politics *Units: 4*
- POSC 3418 - U.S. Immigration Policy and Law *Units: 4*
- POSC 3470 - International Law *Units: 4*

Communication Minor

Minor Requirements (44 units)

The Communication minor offers the student majoring in another discipline the opportunity to study and practice an integrated approach to communications in the 21st century. Students considering careers in law, business, health-care, and criminal justice will benefit from this minor. The Communication Minor consists of 44 units.

Prerequisites to the Minor (8 units)

- COMM 1000 - Public Speaking *Units: 4*
- COMM 1004 - Interpersonal Communication *Units: 4*

Required Core Courses for the Minor (24 units)

- COMM 2300 - 21st Century Communication *Units: 4*
- COMM 2320 - Communication Writing and Design *Units: 4*
- COMM 3002 - Communication, Media and Culture *Units: 4*
- COMM 3004 - Quantitative Communication Research Methods *Units: 4*
or
- COMM 3005 - Qualitative Communication Research Methods *Units: 4*
- COMM 4300 - Intercultural & International Communication *Units: 4*
or
- COMM 4500 - Gender Identity and Representation in Media *Units: 4*
- COMM 4205 - Ethics and Law in Communication *Units: 4*

Required Elective Courses (20 units)

20 units selected in consultation with advisor from *either* the Professional Public and Organizational Communication Option or the Media Production Option, including appropriate senior project: COMM 4885 or COMM 4890.

Computer Science Minor

Minor Requirements (36 units)

Students majoring in other fields may wish to complete a coherent pattern of work in Computer Science or Software Development for the purpose of expanding their employment and educational opportunities.

I. Lower Division Mathematics (8 units)

- MATH 1304 - Calculus I *Units: 4*
- MATH 2150 - Discrete Structures *Units: 4*

II. Lower Division Computer Science (16 units)

- CS 1160 - Introduction to Computer Science I *Units: 4*
- CS 2360 - Introduction to Computer Science II *Units: 4*
- CS 2370 - Introduction to Computer Science III *Units: 4*
- CS 2430 - Computer Organization and Assembly Language Programming *Units: 4*

III. Upper Division Computer Science (12 units)

1. Two courses from the following list:

- CS 3120 - Programming Language Concepts *Units: 4*
- CS 3240 - Data Structures and Algorithms *Units: 4*
- CS 3430 - Computer Architecture *Units: 4*
- CS 4560 - Operating Systems *Units: 4*

2. One upper division Computer Science elective.

This may be a third course from the list in (A) above or any course from category IV of the requirements for the major in Computer Science.

Creative Video Minor

Department Information

Departments of Art, English, Communication,
Theatre and Dance
College of Letters, Arts, and Social Sciences
Office: Robinson Hall 220
Phone: (510) 885-3118

Professor

Thomas C. Hird (Theatre and Dance), M.F.A. University of California, Los Angeles

Program Director: Thomas C. Hird

Program Description

The field of video production, for television as well as for corporate, educational, and Web uses, is expanding rapidly and there is much demand by employers for people with these skills. Other programs and courses at Cal State East Bay feature documentary and news production (COMM); stage acting (THEA); fiction writing for the printed page and the Internet (ENGL). This program introduces a new dimension to each of these areas: narrative or creative video. The new minor enables these departments to collaborate and actually create several videos of broadcast quality each year, giving students the opportunity to learn skills by practicing them.

Minor Requirements (31 units)

Complete 31 units from the following:

- ART 3820 - Digital Video *Units: 4* (has prerequisites that are not included in the program)
- COMM 3100 - Introduction to Professional Video Production *Units: 4*
- ENGL 2070 - Beginning Workshop in Fiction *Units: 4*
- THEA 1020 - Discover Acting *Units: 3*
- THEA 3052 - Acting for the Camera *Units: 4*
- Select 4 units of lower division COMM coursework with consent of department *Units: 4*
- Select 4 units of upper division COMM coursework with consent of department *Units: 4*
- Select 4 units of upper division THEA coursework with consent of department *Units: 4*

Creative Writing Minor

Minor Requirements (32 units)

Any candidate for the bachelor's degree (except for English majors with the Creative Writing option) may also elect to obtain a Minor in Creative Writing. After completing ENGL 1001, (s)he must complete 32 quarter units, approved by a Creative Writing advisor.

- ENGL 2070 - Beginning Workshop in Fiction *Units: 4*
- ENGL 2075 - Beginning Workshop in Poetry *Units: 4*

Select a minimum of 24 quarter units from:

- ENGL 3070 - Intermediate Workshop in Fiction *Units: 4*
- ENGL 3071 - Writing Women's Lives: A Workshop *Units: 4*
- ENGL 4070 - Advanced Workshop in Fiction *Units: 4*
- ENGL 4075 - Advanced Workshop in Poetry *Units: 4*
- ENGL 4900 - Independent Study *Units: 1-4*
- Upper division Modern American or British literature, or genre courses *Units: 4-8*

Note:

Creative writing courses may be repeated for credit. See course descriptions for limitations.

Criminal Justice Administration Minor

Minor Requirements (33 units)

The minor consists of 33 units. The purpose of the minor is to provide interested students with the opportunity to study the central areas of criminal justice. The selected courses will offer instruction in law, law enforcement, ethics, corrections and the courts. The minor allows those students with career plans in the social services and business administration to acquire knowledge of criminal justice, a career area with high employment prospects. Credit/No Credit (CR/NC) grading is not permitted for classes used to meet minor requirements.

I. Lower Division (12 units)

- CRJA 2100 - Elementary Criminal Law *Units: 4*
- CRJA 2200 - Basic Criminal Investigation *Units: 4*
- CRJA 2500 - Administration of Justice *Units: 4*

II. Lower Division Statistics Requirement (5 units)

- STAT 1000 - Elements of Probability and Statistics *Units: 5*

III. Upper Division Requirements (16 units)

- CRJA 3100 - Corrections and Criminal Justice *Units: 4*
- CRJA 3300 - Crime Prevention and Control *Units: 4*
- CRJA 3610 - Police Organization and Management *Units: 4*
- CRJA 3700 - Ethics and Justice Administration *Units: 4*

Dance Minor

Minor Requirements (34 units)

A. Fundamental Courses (6 units)

Complete one course from the following:

- DANC 2020 - Rhythm and Music for Dance *Units: 2*
- DANC 2341 - Improvisation in Art and Life *Units: 2*
- DANC 2342 - Integrating Theatre and Dance *Units: 2*
- DANC 2343 - Body and Mind Training for Performance *Units: 2*
- DANC 2344 - Site Specific Performance *Units: 2*

Complete four courses from the following:

- THEA 2421 - Fundamental Backstage Technology: Wood Scenery: Walls and Levels *Units: 1*
- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2424 - Fundamental Backstage Technology: Sound: Recording *Units: 1*
- THEA 2425 - Fundamental Backstage Technology: Stage Effects *Units: 1*
- THEA 2428 - Fundamental Backstage Technology: Sound: PA *Units: 1*
- THEA 2429 - Fundamental Backstage Technology: Practical Drafting and Model Building *Units: 1*
- THEA 2430 - Fundamental Backstage Technology: Practical Make-up *Units: 1*

B. Core courses (18 units)

Complete twelve units from the following:

- One lower division course with consent of advisor *Units: 4*
- DANC 3251 - Movement Analysis *Units: 4*
- DANC 3252 - Dance Through the Ages *Units: 4*
- *or*
- DANC 4201 - Dance in Modern Society *Units: 4*

Complete at least six units of electives from the following by advisement

Do not repeat a course applied to the Fundamental Courses area above.

- DANC 2020 - Rhythm and Music for Dance *Units: 2*
- DANC 2341 - Improvisation in Art and Life *Units: 2*
- DANC 2342 - Integrating Theatre and Dance *Units: 2*
- DANC 2343 - Body and Mind Training for Performance *Units: 2*
- DANC 2344 - Site Specific Performance *Units: 2*
- DANC 3330 - The Digital Stage: Dance on Camera *Units: 4*
- DANC 3451 - Dance Ensemble A *Units: 3*
- DANC 3452 - Dance Ensemble B *Units: 3*
- DANC 3453 - Dance Ensemble C *Units: 3*
- DANC 3454 - Dance Ensemble D *Units: 3*
- DANC 3455 - Dance Ensemble E *Units: 3*
- DANC 3456 - Dance Ensemble F *Units: 3*

C. Technique Competencies (6 units)

Students must take a minimum of five courses, all with a minimum grade of B, to demonstrate competency in two of the following techniques at the beginning and intermediate level, as well as one of the same techniques at the advanced level: hip hop, modern, jazz, and ballet. At least one advanced course must be taken at CSUEB.

D. Performance and Production Courses (4 units)

Two production assignments required. For each assignment, enroll for a minimum of two (2) units from Theatre Production Activity courses by advisement.

Early Childhood Education Minor

Minor Requirements (24 units)

The minor in Early Childhood Education consists of 24 units.

Required Courses:

- TED 4070 - Early Childhood Education: Language and Literacy Development *Units: 4*
- TED 4071 - Early Childhood Education: Integrated Language Arts and Social Studies *Units: 4*
- TED 4072 - Early Childhood Education: Integrated Math and Science *Units: 4*
- TED 4073 - Early Childhood Education: Integrated Arts *Units: 2*
- TED 4074 - Early Childhood Education: Inclusive Practices *Units: 4*
- TED 4075 - Early Childhood Education: Professional Seminar and Practicum *Units: 6*

Economics Minor

Minor Requirements (29 units)

The minor consists of 29 units. *Note:* A student cannot have both a Business Economics option under the Business Administration major and an Economics minor. Students must have at least 18 units in the minor that are not counted in the major requirement. This means that business administration students cannot receive an Economics minor.

Note: Students must have completed the prerequisites listed in the course description for any course they use to satisfy the following requirements

I. Lower Division (17 units)

- MATH 1130 - College Algebra *Units: 4*
- ECON 2301 - Principles of Microeconomics *Units: 4*
- ECON 2302 - Principles of Macroeconomics *Units: 4*
- STAT 2010 - Elements of Statistics for Business and Economics *Units: 5*
or
- STAT 1000 - Elements of Probability and Statistics *Units: 5*

II. Upper Division (12 units)

Complete the following courses as soon as possible after the lower division requirements have been satisfied:

Choice of two courses from the following

- ECON 3000 - Micro-Economic Theory *Units: 4*
or
- ECON 3551 - Managerial Economics and Business Strategy *Units: 4*
- ECON 3005 - Macro-Economic Theory *Units: 4*
or
- ECON 3006 - Macro-Economics for Business *Units: 4*
or
- ECON 3107 - Global Economic Analysis *Units: 4*

One elective course in Economics

*See Errata section of this catalog for changes to electives made after publication.

- ENGR 3140 - Engineering Economy *Units: 4*
- ECON 3140 - Engineering Economy *Units: 4*

English Minor

Minor Requirements

English (32 units)

The minor in English consists of 32 units, excluding ENGL 1001, ENGL 1002, ENGL 3000, ENGL 3001, and ENGL 3003 approved by an English Department adviser.

At least one course in writing beyond the freshman level; after completing ENGL 1001, choose from the list below. (Apply units to either lower or upper division units below.)

- ENGL 2030
- ENGL 2040 Introduction to Critical Writing on Poetry
- ENGL 2070 Beginning Workshop in Fiction
- ENGL 3020 Advanced Expository Writing
- ENGL 3070 Intermediate Workshop in Fiction
- ENGL 4070 Advanced Workshop in Fiction
- ENGL 4075 Advanced Workshop in Poetry

English courses, excluding ENGL 1001 and ENGL 1002

- Lower Division (0-12)

- Upper Division (20-32)

Environmental Studies Minor

Minor Requirements (35-36 units)

The minor is designed to encourage and enable students enrolled in any major to organize their elective courses around a broad study of the environment and its problems from both a social and scientific perspective. The minor consists of 35-36 units arranged in an integrated pattern, as approved by an advisor. The core program includes four sequential courses (totaling 15-16 units) which are required of all students in the minor. The remaining 20 units are electives selected from the list below.

I. Core Courses (15-16 units)

- ENVT 2000 - Introduction to Environmental Studies *Units: 4*
or
- GEOG 3000 - Sustainable Resource Management *Units: 4*
- ENVT 3400 - Environmental Resource Analysis *Units: 4*
- ENVT 4300 - Environmental Field Studies *Units: 5*
or
- ENVT 3480 - Applied Field Studies *Units: 4*
- ENVT 4800 - Senior Seminar in Environmental Studies *Units: 3*

II. Electives (20 units minimum)

20 units of courses from outside the major department, chosen from the following list and selected to include classes with at least two different program prefixes (e.g. HIST and REC)*:

- BIOL 2005 - Natural History of California *Units: 5*
- ENVT 4320 - Energy and Society *Units: 4*
- GEOG 3120 - Climate Change *Units: 4*
- GEOG 4330 - Sustainable Development *Units: 4*
- GEOG 4350 - Water Resources and Management *Units: 4*
- GEOG 4355 - Watershed Management *Units: 4*
- GEOL 2200 and GEOL 2201 Environmental Geology and Lab *Units: 6*
- HIST 3505 - California Environmental History *Units: 4*
- HOS 4550 - Global Tourism *Units: 4*
- HSC 3200 - Environmental Health *Units: 4*
- PHIL 3151 - Environmental Ethics *Units: 4*
- POSC 3460 - Environmental Law *Units: 4*
- POSC 4171 - Public Policy and the Environment *Units: 4*
- REC 3305 - Outdoor Living Skills *Units: 4*
- REC 4705 - Outdoor Adventure Recreation *Units: 4*

Note:

* Offerings will be expanded as new courses become available. See Environmental Studies advisor

Ethnic Studies Minor

Minor Requirements (24 units)

The Ethnic Studies minor is a comparative Ethnic Studies program that consists of a core of Ethnic Studies courses and Options in African American, Asian American, Genders and Sexualities in Communities of Color, Latino/a and Latin American Studies, and American Indian Studies. The curriculum is multidisciplinary as well as interdisciplinary. The major helps the student qualify for graduate work in social sciences, law, and humanities, and for work in municipal, state, and federal government. Of equal importance are the advantages the major provides to work in community service organizations concerned with opportunities and problems of various ethnic and racial groups.

I. Lower Division (8 units)

One lower division introduction course (4 units) selected from the following:

- ES 1001 - Introduction to Ethnic Studies *Units: 4*
- ES 2500 - Introduction to Asian American Studies *Units: 4*
- ES 2700 - Introduction to Genders and Sexualities in Communities of Color *Units: 4*
- ES 2200 - Introduction to Latino/a and Latin American Studies *Units: 4*
- ES 2400 - Introduction to American Indian Studies *Units: 4*

One lower division elective course (4 units) selected from the following

One lower division elective course (4 units) selected from the following, or a second Introduction course from the list above:

- ES 2130 - Ethnicity and Humor *Units: 4*
- ES 2175 - Hip Hop Nation *Units: 4*
- ES 2300 - The Black Cinematic Tradition *Units: 4*

II. Upper Division (16 units)

- ES 3889 - Engaging Communities of Color *Units: 4*

And any Twelve (12) additional upper-division units

And any Twelve (12) additional upper-division units in at least three Ethnic Studies Options including African American Studies, Asian American Studies, American Indian Studies, Genders & Sexualities in Communities of Color, and Latino/a and Latin American Studies selected in consultation with an Ethnic Studies advisor.

- ES 3030 - Immigrant and Refugee Women *Units: 4*
- ES 3105 - African American Identity *Units: 4*
- ES 3110 - Racism in America I *Units: 4*
- ES 3120 - The Civil Rights Movement *Units: 4*
- ES 3130 - Slavery in the Americas *Units: 4*
- ES 3140 - Racism and Sports *Units: 4*
- ES 3145 - African American Music *Units: 4*
- ES 3146 - Jazz on Film *Units: 4*
- ES 3165 - African American Sexuality *Units: 4*
- ES 3190 - Internationalist Worldview of Malcolm X *Units: 4*
- ES 3210 - Latinas in the United States *Units: 4*
- ES 3230 - Oral Traditions *Units: 4*
- ES 3255 - The Chicano Movement *Units: 4*
- ES 3265 - Latino/a Sexualities *Units: 4*
- ES 3303 - Contemporary African American Women Writers *Units: 4*
- ES 3305 - Contemporary American Indian Life *Units: 4*
- ES 3310 - God is Red: American Indian World View *Units: 4*

- ES 3330 - American Indian Revitalization Movements *Units: 4*
- ES 3333 - Ethics and Minority Politics *Units: 4*
- ES 3420 - Minority Women in America *Units: 4*
- ES 3430 - Interracial Sex and Marriage *Units: 4*
- ES 3434 - Mixed Race Identities *Units: 4*
- ES 3500 - The Afghan Diaspora *Units: 4*
- ES 3552 - The Chinese Experience in the United States *Units: 4*
- ES 3555 - Asian American Family Patterns *Units: 4*
- ES 3556 - Concentration Camps, U.S.A. *Units: 4*
- ES 3557 - Asian American Film Festival *Units: 4*
- ES 3600 - Presumed Guilty: Asian Americans and the Post-9/11 Racialized State *Units: 4*
- ES 3610 - South Asian American Experience *Units: 4*
- ES 3691 - Black Literature I *Units: 4*
- ES 3700 - Special Topics in Ethnic Studies *Units: 4*
- ES 3710 - Racialized Masculinities *Units: 4*
- ES 3720 - James Baldwin *Units: 4*
- ES 3730 - Women of Color, Genders and Sexualities *Units: 4*
- ES 3800 - Peoples of Central America *Units: 4*
- ES 3805 - Latin American Immigration *Units: 4*
- ES 3999 - Issues in Ethnic Studies *Units: 4*
- ES 4900 - Independent Study *Units: 4*
- ES 4290 - Latino Politics and Public Policy *Units: 4*
- ES 4300 - Queer of Color Subjects and Critical Theory *Units: 4*

- ES 3030 - Immigrant and Refugee Women *Units: 4*
or
- WOST 3030 - Immigrant and Refugee Women *Units: 4*

- ES 3420 - Minority Women in America *Units: 4*
or
- WOST 3420 - Minority Women in America *Units: 4*

- LAST 3000 - Latin American Women and Globalization *Units: 4*
- LAST 3260 - Latin American Women and Globalization *Units: 4*
- LAST 3370 - Latin American Social Movements *Units: 4*
- LAST 3999 - Issues in Latin American Studies *Units: 4*
- ENGL 3692 - Black Literature II *Units: 4*

- ENGL 3691 - Black Literature I *Units: 4*
or
- ES 3691 - Black Literature I *Units: 4*

- HIST 3567 - African American History *Units: 4*
or
- ES 3567 - African American History *Units: 4*

- SOC 3415 - Sociology of the African American Family *Units: 4*
- ENGL 3670 - Asian/Filipino American Literature *Units: 4*
- HIST 3515 - Mexican Americans and the West *Units: 4*
- ANTH 3500 - North American Indians *Units: 4*

Filipino and Filipino American Studies Minor

Program Description

Note: The department is not accepting students for the Minor in Filipino and Filipino American Studies at this time. This Program will be discontinued effective Fall 2016.

The Filipino and Filipino American Studies Minor serves several purposes. First, this minor strengthens the study of Asian civilizations and U.S. ethnic minority groups at Cal State East Bay by focusing on Filipinos and Filipino Americans. Second, students interested in taking courses related to Filipino and Filipino American experiences will be able to count these courses toward a minor. Third, the minor provides a foundation of cultural and social knowledge for students who plan to take business courses which deal with Filipino American communities and/or who plan to participate in international student exchanges with universities in the Philippines. Currently, students may participate in exchange programs between Cal State East Bay and selected universities in the Philippines such as De La Salle University, University of Northern Philippines, Silliman University, and the University of the Philippines (Diliman).

Minor Requirements (28 units)

The minor consists of a minimum of 28 units of coursework selected from the following lists of core and elective courses. No more than 10 units of coursework applied toward a major may be counted for the minor. With the approval of the Filipino and Filipino American Studies advisor, a maximum of eight other appropriate units, including independent study or directed research, may be substituted for the Electives requirement.

I. Core Courses (20 units)

- SOC 3507 - Filipino American Communities *Units: 4*
- SOC 3550 - Filipino Labor/Immigration *Units: 4*
- MLL 1651 - Elementary Filipino I *Units: 4 2*
- MLL 1652 - Elementary Filipino II *Units: 4 2*
- THEA 3311 - Filipino Theatre *Units: 4*

II. Electives (8 units)

- ANTH 3710 - Anthropology and Museums *Units: 4 1*
- COMM 4830 - Intercultural Communication *Units: 4*
- ECON 4710 - International Economic Development *Units: 4 1*
- ENGL 3670 - Asian/Filipino American Literature *Units: 4*
- ENTR 4490 - Practicum in Small Business Management *Units: 4 1*

- ES 3030 - Immigrant and Refugee Women *Units: 4*
or
- WOST 3030 - Immigrant and Refugee Women *Units: 4*

- ES 3551 - Asian American Women and Men *Units: 4*
- ES 3555 - Asian American Family Patterns *Units: 4*
- GEOG 3550 - Geography of Southeast Asia *Units: 4*
- HIST 3517 - The Immigrants' West *Units: 4*
- MKTG 4450 - Marketing Seminar *Units: 4 1*
- MLL 1653 - Elementary Filipino III *Units: 4 2*
- POSC 3204 - Political Systems of Asia *Units: 4*
- POSC 3418 - U.S. Immigration Policy and Law *Units: 4*
- SOC 3425 - Prejudice and Discrimination *Units: 4*
- SOC 3510 - Sociology of Identity *Units: 4*
- SOC 3520 - Sociology of Race and Ethnic Relations *Units: 4*
- THEA 3233 - Modern Philippine Dramatic Literature and Styles *Units: 4*
- WOST 3550 - Women, Work, and Family Life *Units: 4*

Footnotes

1. These elective courses require Filipino and Filipino American studies content and approval of an advisor.
2. Students, whose Filipino language competency places them out of lower division coursework, must complete 8 additional units from the list of electives (excluding MLL 1653).

French Minor

Minor Requirements (20-44 units)

A. Lower Division (0-24 units)

- MLL 1101 - Elementary French I *Units: 4*
- MLL 1102 - Elementary French II *Units: 4*
- MLL 1103 - Elementary French III *Units: 4*
- MLL 2101 - Intermediate French I *Units: 4 or equivalent*
- MLL 2102 - Intermediate French II *Units: 4 or equivalent*
- MLL 2103 - Intermediate French III *Units: 4 or equivalent*

Note:

Lower division requirements will be waived for student with prior knowledge of the language. See the "Advanced Placement" section above.

B. Upper Division (20 units)

- Eight upper division units in French composition and advanced composition, with consent of Department (8)
- Any three other upper division French courses (12)

Genders and Sexualities in Communities of Color Minor

Minor Requirements (24 units)

In this minor, students will have the opportunity to focus critical attention on the intersection of race, gender, and sexuality through a variety of expressive and rhetorical modes, including performance, literature, music, visual arts, digital media, and public debate. Grounded in contemporary queer of color theory and woman of color feminist scholarship, courses in this minor explore gender and sexuality as complex social formations that produce a multiplicity of identities and practices.

I. Core Courses (8 units)

- ES 2700 - Introduction to Genders and Sexualities in Communities of Color *Units: 4*
- ES 4040 - Senior Seminar *Units: 4*

II. Electives (16 units)

Select 4 courses from the following:

- ES 3165 - African American Sexuality *Units: 4*
- ES 3265 - Latino/a Sexualities *Units: 4*
- ES 3210 - Latinas in the United States *Units: 4*
- ES 3710 - Racialized Masculinities *Units: 4*

- ES 3720 - James Baldwin *Units: 4*
- ES 3730 - Women of Color, Genders and Sexualities *Units: 4*
- ES 4300 - Queer of Color Subjects and Critical Theory *Units: 4*

Geography Minor

Minor Requirements (36 units)

The minor consists of 36 units.

- GEOG 2100 - Physical Geography *Units: 4*
- GEOG 2300 - Cultural Geography *Units: 4*
- GEOG 3410 - Air-Photo Interpretation *Units: 4*
- Two regional courses (3500 series) from different instructors *Units: 8*

Four courses from one of the following groups (16 units):

A. Human Geography Option

- GEOG 2310 - Economic and Resource Geography *Units: 4*
- GEOG 3320 - Food, Culture and Environment *Units: 4*
- GEOG 3360 - Historical Geography of North America *Units: 4*
- One course selected from GEOG 3000-level courses with consent of advisor

B. Physical-Biotic Resources Option:

- GEOG 3115 - Physical Landscape Analysis *Units: 4*
- GEOG 3120 - Climate Change *Units: 4*
- GEOG 4320 - Energy and Society *Units: 4*
- GEOG 4350 - Water Resources and Management *Units: 4*

Geology Minor

Minor Requirements (28-34 units)

The minor consists of 28-34 units

I. Core Courses

- GEOL 2101 - Physical Geology *Units: 5*
- GEOL 2102 - Earth and Life Through Time *Units: 4*

II. Electives

One lower division elective from the following (4-5 units):

- GEOL 1000 - Earth Systems Science *Units: 5*
- GEOL 1001 - Introduction to the Earth Sciences *Units: 4*
- GEOL 1201 - Introduction to Oceanography *Units: 4*
- GEOL 2000 - Introduction to the Geology of California *Units: 4*

- GEOL 2300 - Natural Disasters *Units: 4*

Four upper division electives

Chosen from the following with assistance of minor advisor (15-20 units):

- GEOL 3040 - Weather and the Atmosphere *Units: 4*
- GEOL 3050 - Volcanoes and Plate Tectonics *Units: 4*
- GEOL 3100 - Geology of the Western National Parks *Units: 4*
- GEOL 3110 - Principles of Geomorphology *Units: 4*
- GEOL 3400 - General Oceanography *Units: 4*
- GEOL 3401 - The Oceans *Units: 4*
- GEOL 3601 - Mineralogy and Optical Crystallography *Units: 5*
- GEOL 3701 - Igneous and Metamorphic Petrology *Units: 5*
- GEOL 3801 - Sedimentology and Stratigraphy *Units: 5*
- GEOL 3810 - Structural Geology *Units: 5*
- GEOL 3910 - Geologic Field Methods *Units: 3*
- GEOL 4320 - Hydrogeology *Units: 4*

Program Description

Geology is the study of the earth and of life and the natural processes occurring on the earth through time. Students learn about the causes of earth processes such as earthquakes, volcanoes, the formation of mountains, the effect of erosion and deposition, and the formation of rocks and minerals and their uses. Coursework combined with observations on field trips provide Cal State East Bay students with an understanding of natural processes and the human impact on the environment.

The undergraduate degree programs consist of required courses plus electives designed to meet the needs of students with objectives including employment at the Bachelor's degree level, preparation for a secondary school teaching credential, and graduate study in Geology. The Geology, B.S. program is the primary professional degree program in Geology offered by the department, and serves as preparation for employment in the field, usually in a technical capacity. The Geology, B.A. program offers the student a greater degree of flexibility and may be more appropriate for those who do not necessarily plan to become professional geologists or pursue graduate study. (Note: Transfer from the Geology, B.A. to the Geology, B.S. program or vice versa can be accomplished.) Students wishing to do independent geological work professionally should plan on graduate study; see the Geology, M.S. program in the Department of Earth and Environmental Sciences (Graduate).

Student Learning Outcomes

Students graduating with a Geology, B.S. or Geology, B.A. from Cal State East Bay will be able to:

1. identify and classify geologic materials, including minerals, rocks, and fossils, and know their material and/or biological properties or characteristics.
2. collect, organize, and analyze qualitative and quantitative data from both field and laboratory investigations such as lithostratigraphic and biostratigraphic correlations, geologic maps, geophysical surveys, cross-sections, soil tests, and geochemical and groundwater quality analyses.
3. synthesize, interpret and critically analyze geologic datasets (2D and 3D) and reports using discipline-specific methods, techniques, and equipment.
4. critically analyze geological and environmental issues through the evaluation of scientific literature, and present their positions clearly and persuasively in written and oral form.
5. understand geologic time, evolution, Earth's place in the Universe, and global-scale processes such as plate tectonics, earth systems interactions, and climate change.

Career Opportunities

- Engineering Geologist
- Environmental Geologist
- Geochemist
- Geologist
- Geophysicist

- Hydrologist
- Mineralogist
- Paleontologist
- Park Ranger
- Petrologist
- Seismologist
- Soils Engineer
- Stratigrapher
- Oceanographer

Features

The undergraduate Geology programs emphasize field and laboratory training. Many opportunities for field and laboratory research exist throughout northern California and elsewhere.

The Cummings Earth Science Club, a student-run organization, sponsors a variety of activities including guest speakers, field trips, employment workshops, and student-faculty gatherings. The club is an important part of department life, providing students with opportunities to make professional contacts, to explore graduate school and professional options, and to enjoy the company of others with similar interests. For more information, contact the faculty advisor or the current club president at (510) 885-3486.

Students completing the Geology major may apply four (4) units of mathematics and eight (8) units of chemistry (or physics) to the Natural Sciences and Mathematics requirement (Area B) in their General Education Requirements. (See the General Education Evaluator and Class Schedule for more information.)

German Minor

Minor Requirements (24-36 units)

IMPORTANT NOTICE: The department is not accepting students into the German Minor at this time.

A. Lower Division

- MLL 1201 - Elementary German I *Units: 4*
- MLL 1202 - Elementary German II *Units: 4*
- MLL 1203 - Elementary German III *Units: 4*
- Twelve units of lower division coursework in Intermediate German, with consent of advisor *Units: 12*

Note:

Lower division requirements will be waived for student with prior knowledge of the language. See the "Advanced Placement" section above.

B. Upper Division

- Four units of upper division coursework in Advanced German, with consent of advisor *Units: 4*
- Eight units of upper division coursework in German studies, with consent of advisor *Units: 8*

Health Sciences Minor

Minor Requirements (24 units)

The minor consists of 24 units. Complete 24 units of Health Sciences (HSC) prefix courses of which at least 12 units must be upper division. Specific courses related to a student's major and/or educational and career goals must be selected in consultation with a Health Sciences faculty advisor. A grade of "C" or better is required for all minor courses with an HSC prefix.

History Minor

Minor Requirements (32 units)

The minor consists of 32 units. HIST 3400 may not be counted towards the minor.

I. Lower Division (16 units)

- HIST 1014 - World Civilizations I *Units: 4*
or
- HIST 1017 - Ancient World Civilizations *Units: 4*

- HIST 1015 - World Civilizations II *Units: 4*
- HIST 1016 - World Civilizations III *Units: 4*
- HIST 2010 - Introduction to History *Units: 4*

II. Upper Division (16 units)

A. Historical Writing

- HIST 3010 - Historical Writing *Units: 4*

B. Area Requirements

A minimum of four units of upper division History courses in each of the following areas: (1) Europe, (2) United States, and (3) Latin America or Asia (12)

Hospitality and Tourism Minor

Minor Requirements (32 units)

The minor consists of 32 units.

I. Required (24 units)

- HOS 4510 - Lodging Management *Units: 4*
- HOS 4520 - Promotion of Leisure and Hospitality *Units: 4*
- HOS 4540 - Fiscal Leadership for Operational Managers *Units: 4*
- HOS 4560 - Food and Beverage Management *Units: 4*
- HOS 4570 - Dimensions in Tourism *Units: 4*
- HOS 4590 - Hospitality Law *Units: 4*

II. Electives (8 units)

Select two courses from the following:

- HOS 4505 - Hospitality Information Technology *Units: 4*

- HOS 4530 - Principles of Meetings, Conventions and Special Events *Units: 4*
- ACCT 2701 - Legal Environment of Business *Units: 4*
- MGMT 3600 - Theories of Management *Units: 4*
- MGMT 3610 - Strategic Human Resources Management *Units: 4*
- MGMT 3614 - Organizational Behavior *Units: 4*
- MKTG 3495 - Business Communication *Units: 4*

Human Development Minor

Minor Requirements (24 units)

The minor is designed for students who are interested in the study of human development over the lifespan. The minor consists of 24 units. Select 24 units from any 3000 or 4000 level human development courses.

Information Technology Management Minor

Minor Requirements (20-24 units)

The minor in Information Technology Management is offered through the Department of Management. Business Administration majors who want to have this minor listed on their transcripts must have at least 18 units in the minor that are not counted in the major requirements.

Note: Students must have completed the prerequisites listed in the course description for any course they use to satisfy the following requirements.

I. Lower Division (0-4 units)

P/C Software Proficiency (students lacking this proficiency must take ITM 1270)

II. Upper Division (20 units)

*See the Errata section in this catalog for upper-division elective corrections made after publication.

- ITM 3060 - Information Technology Management *Units: 4*
- 6 units from courses permitted in the Information Technology Management Option in the Business Administration major.

Interactive Sculpture Minor

Minor Requirements (28 units)

- ART 1116 - Introduction to Sculpture *Units: 4*
- ART 3330 - Electronics for Sculpture *Units: 4*
- ART 3400 - History of Art and Technology *Units: 4*
- ART 4370 - Human and Machine Performance *Units: 4*
- Select 4 units of coursework covering tangible digital environments, with consent of department *Units: 4*
- Select 4 units of coursework covering interactive sculpture, with consent of department *Units: 4*
- Select 4 units of upper division coursework covering fabrication for sculpture, with consent of department *Units: 4*

Note:

Students who have taken PHYS 3280 - Electronics , or CS 3432 - Digital Design Lab, may substitute ART 4070 - Currents in New Media for ART 3330.

International Business Minor

Program Description

The International Business Minor is designed to provide you with a foundation in:

1. general business administration;
2. a specialty within business in finance, marketing, or personnel administration/industrial relations;
3. international business; and
4. international studies including languages and cultural and political background.

Coursework required for the minor has been combined into three modules: (A) Business Administration, (B) Specialty/International Business, and (C) International Studies. Students in Business Administration will have satisfied Module A as part of their Business Administration major and need only Modules B and C (a total of 40-48 units) to complete an International Business Minor. Students in the College of Letters, Arts, and Social Sciences with a major or minor in the Department of Modern Languages and Literatures, can easily have at least 24 units of Module C satisfied as part of their major or minor program, leaving them with Modules A and B, and possibly 8 units of C (a total of 40-48 units) to complete for an International Business Minor.

Minor Requirements

All three modules must be satisfied. Business Administration majors substituting the minor for an option must take all coursework in the minor for a letter grade. Note that units taken to satisfy the requirements of a minor can be applied to General Education requirements wherever applicable as long as the units are outside the prefixes of the student's major. (Note: ACCT, ENTR, FIN, ITM, MGMT, and MKTG are prefixes in the Business Administration major.)

Note: Students must have completed the prerequisites listed in the course description for any course they use to satisfy the following requirements.

Module A, Business Administration (24 units)

Please consult the College of Business and Economics Student Services for Module A advising.

- ACCT 2251 - Introduction to Financial Accounting *Units: 4*
- ECON 2301 - Principles of Microeconomics *Units: 4*
- ECON 2302 - Principles of Macroeconomics *Units: 4*

- ECON 3107 - Global Economic Analysis *Units: 4*
or
- MGMT 4670 - Multinational Business *Units: 4*

- MGMT 3600 - Theories of Management *Units: 4*
- MKTG 3401 - Marketing Principles *Units: 4*

Module B, Specialty/International Business (16 units)

Please consult the College of Business and Economics Student Services for Module B advising

I. Complete one of the three following specialty areas (8 units):

A. Finance

(Business Administration majors selecting the Finance specialty should choose FIN 4310 and FIN 4320 since they will be completing FIN 3300 as part of the upper division Business Administration core requirements.) *Required (4 units):*

- FIN 3300 - Financial Management *Units: 4*

Choice of one (4 units):

- FIN 4310 - Investment Analysis *Units: 4*
- FIN 4320 - Problems in Corporate Finance *Units: 4*

B. Marketing

Required (8 units):

- MKTG 3410 - Advertising Management *Units: 4*
- MKTG 3445 - Marketing Research *Units: 4*

C. Human Resources Management (HRM)

(Business Administration majors selecting the HRM specialty should choose either MGMT 3610 and MGMT 4615 or MGMT 4680 and MGMT 4683.) *Choice of one set (8 units):*

Choice 1

- MGMT 3610 - Strategic Human Resources Management *Units: 4*
- MGMT 3680 - Employee Relations and Employment Law *Units: 4*
or
- MGMT 4615 - Compensation and Reward Systems *Units: 4*

Choice 2

- MGMT 3680 - Employee Relations and Employment Law *Units: 4*
- and another upper-division MGMT course covering collective bargaining, labor law, and/or labor relations, with consent of advisor *Units: 4*

II. Select two courses from the following list, with one of the two courses being in the student's chosen specialty area (8 units):

- ECON 3107 - Global Economic Analysis *Units: 4*
- ECON 4700 - International Trade *Units: 4*
- ECON 4705 - International Finance *Units: 4* (Finance specialty)
- FIN 4375 - International Business Finance *Units: 4*
- MGMT 4675 - International Human Resources Management *Units: 4* (HRM specialty)
- MKTG 4470 - International Marketing *Units: 4* (Marketing specialty)

Module C, International Studies (24-32 units)

(All of the courses taken to satisfy items C II and C III in this module must have their content reaching primarily beyond the student's native culture and geographic region. A student's choices of language and area studies courses must relate to the same geographic region. Students whose native language is other than English may choose English as their second language, if their native language is determined by the committee administering the minor to have sufficient significance as a language of commerce. Students using English as their second language may make either U.S./Canada or Great Britain (not both) the focus of their C III coursework.)

Please consult Dr. Norman A. Bowen (Political Science) for Module C advising.

I. Choice of one of the following (4 units):

- COMM 4830 - Intercultural Communication *Units: 4*

- HIST 3550 - The History of U.S. Foreign Relations *Units: 4*
- INTS 3100 - Global Systems *Units: 4*
- POSC 3520 - International Relations *Units: 4*
- SOC 3431 - Seminar in World Development *Units: 4*

II. Intermediate level competency in a modern language including a course in business terminology if available (0-24 units)

(Competency must be certified by the Cal State East Bay Department of Modern Languages and Literatures. Competency-certified language units based on other than regular classroom transcript coursework or based on courses challenged for CR/NC will not count as part of the minimum 24 units required for Module C.)

III. A minimum of 4 units in area studies

e.g., Latin America, Middle East, Northern Europe, Southeast Asia, with sufficient additional units in C III to bring the total acceptable credit units for Module C to a minimum of 24 units (4-20 units). (Courses for C III must be approved by the assigned International Business Minor advisor.)

- A maximum of 48 units outside a Business Administration or Modern Language major is required.

International Studies Minor

Minor Requirements (28-40 units)

The minor consists of 28-40 units.

I. Lower Division (8-20 units)

A. Twelve (12) units of a modern foreign language or the equivalent

Twelve (12) units of a modern foreign language or the equivalent as determined by examination. The language, when possible, should be coordinated with the student's other coursework in the minor. It is strongly recommended that a student achieve a higher level of proficiency in a foreign language through courses in language, culture, or literature.

B. Eight (8) units selected from:

- ANTH 1300 - Introduction to Cultural Anthropology *Units: 4*
or
- GEOG 2300 - Cultural Geography *Units: 4*
- ENVT 2000 - Introduction to Environmental Studies *Units: 4*
or
- GEOG 2310 - Economic and Resource Geography *Units: 4*
- POSC 1500 - Conflict in World Politics *Units: 4*
- ECON 1000 - Economics of Public Issues *Units: 4*
or
- ECON 2301 - Principles of Microeconomics *Units: 4*
or
- ECON 2302 - Principles of Macroeconomics *Units: 4*

II. Upper Division (20 units)

A. Global Systems

- INTS 3100 - Global Systems *Units: 4*

B. Sixteen (16) units of upper division international course work

Sixteen (16) units of upper division international course work from the College of Letters, Arts, and Social Sciences (CLASS) or the College of Business and Economics, selected with the approval of an International Studies Minor advisor. No more than eight (8) units may be taken in any one department; a minimum of eight (8) units must be taken in CLASS.

Italian Minor

Minor Requirements (24-36 units)

IMPORTANT NOTICE: The department is not accepting students into the Italian Minor at this time.

A. Lower Division (12-24 units)

- MLL 1301 - Italian Culture and Language I *Units: 4*
- MLL 1302 - Italian Culture and Language II *Units: 4*
- MLL 1303 - Italian Culture and Language III *Units: 4*
- 12 units of intermediate Italian, with consent of advisor *Units: 12*

Note:

Lower division requirements will be waived for student with prior knowledge of the language. See the "Advanced Placement" section above.

B. Upper Division (12 units)

- Four units of upper division coursework in cultural trends in Italy *Units: 4*
- Four units of upper division coursework in contemporary spoken Italian, with consent of advisor *Units: 4*
- Four units of upper division coursework in Italian literature, with consent of advisor *Units: 4*

Kinesiology Minor

Minor Requirements (35 units)

The minor in Kinesiology consists of 35 units.

The minor in Kinesiology serves students who wish to acquire knowledge of Kinesiology as a secondary academic focus. It also enables students who have a degree in another field to meet the prerequisite coursework requirements for the Master of Science degree in Kinesiology.

1. Lower Division Prerequisite (5 units)

- BIOL 2010 - Human Physiology and Anatomy I *Units: 5*

2. Upper Division Core (9 units)

- KIN 3300 - Critical Inquiry in Kinesiology *Units: 5*
- KIN 3305 - Structural Kinesiology *Units: 4*

3. Upper Division Electives (18 units)

Complete two of the following:

- KIN 3310 - Biomechanics *Units: 5*
- KIN 3320 - Exercise Physiology *Units: 5*
- KIN 3330 - Motor Learning and Control *Units: 5*
- KIN 3350 - Sport and Exercise Psychology *Units: 5*

Complete two of the following:

- KIN 3340 - Motor Development *Units: 4*
- KIN 3701 - History of Physical Activity *Units: 4*
- KIN 3740 - Philosophical Foundations of Kinesiology *Units: 4*
- KIN 3750 - Sport in Contemporary Society *Units: 4*

4. Performance Requirements (3 units)

Complete at least one proficiency in at least three of the designated categories: aquatics, team sports, individual or dual sports, combatives, and fitness activities.

Latino/a and Latin American Studies Minor

Minor Requirements (24 units)

The Latino/a and Latin American Studies minor offers the student majoring in another discipline the opportunity to acquire knowledge and understanding of one of the history, culture, politics, and social conditions of Latinos/as in the US as well of the culture and politics of Latin America and the larger socio-political processes of globalization, migration, and diaspora.

I. Lower Division (8 units)

- ES 1001 - Introduction to Ethnic Studies *Units: 4*
- ES 2200 - Introduction to Latino/a and Latin American Studies *Units: 4*

II. Upper Division (16 units)

- ES 3889 - Engaging Communities of Color *Units: 4*

And any Twelve (12) additional upper-division units

And any Twelve (12) additional upper-division units in Latino/a and Latin American Studies, selected in consultation with an Ethnic Studies advisor:

- ES 3202 - Latino/a Writers *Units: 4*
- ES 3210 - Latinas in the United States *Units: 4*
- ES 3230 - Oral Traditions *Units: 4*
- ES 3243 - Latino/a Perspectives in Film *Units: 4*
- ES 3255 - The Chicano Movement *Units: 4*
- ES 3265 - Latino/a Sexualities *Units: 4*
- ES 3700 - Special Topics in Ethnic Studies *Units: 4*
- ES 3800 - Peoples of Central America *Units: 4*

- ES 3805 - Latin American Immigration *Units: 4*
- ES 3999 - Issues in Ethnic Studies *Units: 4*
- ES 4290 - Latino Politics and Public Policy *Units: 4*
- ES 4900 - Independent Study *Units: 4*
- LAST 3000 - Latin American World *Units: 4*
- LAST 3260 - Latin American Women and Globalization *Units: 4*
- LAST 3370 - Latin American Social Movements *Units: 4*
- HIST 3515 - Mexican Americans and the West *Units: 4*
- SOC 3416 - Sociology of the Mexican American Family *Units: 4*

Marketing Minor

Minor Requirements (32 units)

The minor in Marketing is offered through the Department of Marketing and Entrepreneurship. Business Administration majors who want to have this minor listed on their transcripts must have at least 18 units in the minor that are not counted in the major requirements.

Note: Students must have completed the prerequisites listed in the course description for any course they use to satisfy the following requirements.

I. Lower Division (12 units)

- ACCT 2251 - Introduction to Financial Accounting *Units: 4*
- ECON 2301 - Principles of Microeconomics *Units: 4*
- ENTR 2485 - Establishing and Managing a Small Business *Units: 4*

II. Upper Division (20 units)

- MGMT 3614 - Organizational Behavior *Units: 4*
- MKTG 3401 - Marketing Principles *Units: 4*
- Select three additional Marketing courses for 12 units (excluding: ENTR 4485, ENTR 4490, and MKTG 3495).

Mathematics Minor

Minor Requirements (28 units)

The minor consists of 28 units.

Required courses:

- MATH 1304 - Calculus I *Units: 4*
- MATH 1305 - Calculus II *Units: 4*
- MATH 2101 - Elements of Linear Algebra *Units: 4*
- MATH 2304 - Calculus III *Units: 4*
- MATH 3000 - Introduction to Abstract Mathematics and Proofs *Units: 4*

One course from the following list:

- MATH 3100 - Linear Algebra *Units: 4*
- MATH 3121 - Abstract Algebra I *Units: 4*
- MATH 3215 - Geometry I *Units: 4*

- MATH 3300 - Analysis I *Units: 4*
- MATH 3331 - Differential Equations *Units: 4*

One 4-unit

One 4-unit course which may include any upper division mathematics courses not already taken for the minor.

Or

or STAT 3401, STAT 3502 or CS 4170, CS 4245 (but not MATH 4012, MATH 4013, MATH 4014, MATH 4030).

Multimedia Minor

Minor Requirements (36 units)

- ART 2025 - Basics of New Media *Units: 4*
- ART 2630 - Digital Photography I *Units: 4*
- ART 2810 - Principles of Design *Units: 4*
- ART 2830 - Web Design *Units: 4*
- ART 3400 - History of Art and Technology *Units: 4*
- ART 3800 - Animation *Units: 4*
- ART 3820 - Digital Video *Units: 4*
- ART 3830 - Digital Imaging *Units: 4*
- ART 3870 - Web Authoring *Units: 4*

Music Minor

Minor Requirements (33 units)

The minor consists of 33 units.

Note: To be admitted to the minor program, the student must demonstrate vocal or instrumental performing ability. Applied instruction will be limited to three quarters of study.

Required courses:

- MUS 1027 - Sightsinging I *Units: 1*
- MUS 1028 - Sightsinging II *Units: 1*
- MUS 1029 - Sightsinging III *Units: 1*
- MUS 1031 - Music Theory I *Units: 4*
- MUS 1032 - Music Theory II *Units: 4*
- MUS 1033 - Music Theory III *Units: 4*
- MUS 1610 - Level 10 Applied Study: Piano *Units: 1* - MUS 1699 for 3 quarters
- MUS 3500 - MUS 3550 - Chamber Ensembles: Jazz Combos-Jazz Improvisation Ensemble *Units: 1 2* for 4 quarters

Class piano instruction taken from:

For three units

- MUS 1314 - Basic Piano Class I *Units: 1*
- MUS 1315 - Basic Piano Class II *Units: 1*

- MUS 1316 - Basic Piano Class III *Units: 1*

or

- MUS 2311 - Intermediate Class Piano I *Units: 1 2*
- MUS 2312 - Intermediate Class Piano II *Units: 1 2*
- MUS 2313 - Intermediate Class Piano III *Units: 1 2*

Upper division electives in music

Upper division electives in music selected in consultation with departmental advisor *Units: 8*

Footnote

2. Substitutions for this requirement may be made, with the approval of the Departmental Minor advisor.

Philosophy Minor

Minor Requirements (28 units)

The Philosophy minor consists of 28 units of Philosophy courses of which at least 24 units must be upper division. The purpose of the Minor in Philosophy is to provide a general background in Philosophy. Philosophy minors can choose any set of upper division Philosophy classes, which can include courses in the areas of religious studies, law, human rights, social justice, philosophy of science, ethics, and the history of philosophy. Philosophy courses focus on writing and critical reasoning skills; therefore the Philosophy Minor fits well with any major. Prospective Philosophy minors should consult with a Philosophy department advisor or the chairperson to select courses.

Photography Minor

Minor Requirements (36 units)

Minor Core (20 units)

- ART 2025 - Basics of New Media *Units: 4*
- ART 2630 - Digital Photography I *Units: 4*
- ART 3600 - Digital Photography II *Units: 4*
or crosslisted COMM 3600.
- ART 4600 - Image and Idea *Units: 4*
or crosslisted COMM 4600.
- COMM 4620 - History of Photography *Units: 4*
or crosslisted ART 4620.

Electives (16 units)

Selected with an advisor from the following list:

- ART 2702 - Black and White Photography II *Units: 4*
- ART 2810 - Principles of Design *Units: 4*
- ART 2830 - Web Design *Units: 4*
- ART 3620 - Alternative Processes in Photography *Units: 4*
- ART 3630 - Digital Photography III *Units: 4*
or crosslisted COMM 3630.
- ART 3640 - Special Topic in Photography *Units: 4*
- ART 3654 - Landscape Photography *Units: 4*

- ART 3661 - Advanced Portrait Photography *Units: 4*
- ART 4621 - History of Photography Since 1960 *Units: 4*
- ART 4645 - Creative Photography *Units: 4*
- ART 4745 - Senior Project in Photography *Units: 4*
- ART 4900 - Independent Study *Units: 1-4*
- ART 3660 - Portrait Photography *Units: 4*
or crosslisted COMM 3660.
- ART 3670 - Introduction to Studio Lighting *Units: 4*
or crosslisted COMM 3670.
- ART 3671 - Advanced Studio Lighting *Units: 4*
or crosslisted COMM 3671.
- ART 3680 - Photography Career Preparation *Units: 2*
or crosslisted COMM 3680.
- COMM 3100 - Introduction to Professional Video Production *Units: 4*
- COMM 3220 - Media Workshop: Print *Units: 2*
- COMM 3340 - Graphic Communication *Units: 4*
- COMM 3700 - Digital Photography and Photo Essay *Units: 4*
- COMM 3500 Photojournalism *Units: 4, or crosslisted ART 3500.*

Physics Minor

Minor Requirements (33 units)

The minor in physics is designed to provide a general background in physics for students majoring in other areas. It is of particular value to students majoring in such sciences as biology, chemistry, computer science, geology, and mathematics. A minor in physics will broaden students' understanding of physical science and will expand employment opportunities, including teaching at the secondary school level. The minor consists of 33 units.

A. Required courses (20 units)

- PHYS 1001 - General Physics: Newtonian Mechanics and Oscillations *Units: 5*
- PHYS 1002 - General Physics: Thermodynamics and Optics *Units: 5*
- PHYS 1003 - General Physics: Electromagnetism *Units: 5*
- PHYS 2004 - General Physics *Units: 5*

B. Three courses from the following list (9 units)

- PHYS 3101 - Analytic Mechanics I *Units: 3*
- PHYS 3102 - Analytic Mechanics II *Units: 3*
- PHYS 3151 - Thermal and Statistical Physics I *Units: 3*
- PHYS 3152 - Thermal and Statistical Physics II *Units: 3*
- PHYS 3301 - Quantum Mechanics I *Units: 3*
- PHYS 3302 - Quantum Mechanics II *Units: 3*
- PHYS 3303 - Quantum Mechanics III *Units: 3*
- PHYS 4001 - Electromagnetism I *Units: 3*
- PHYS 4002 - Electromagnetism II *Units: 3*
- PHYS 4003 - Electromagnetism III *Units: 3*
- PHYS 4600 - Solid State *Units: 3*
- PHYS 4700 - Modern Optics *Units: 3*

C. One course from the following list (4 units)

- PHYS 3180 - Computational Physics *Units: 4*
- PHYS 3280 - Electronics *Units: 4*
- PHYS 3281 - Experimental Physics *Units: 4*
- PHYS 3283 - Advanced Laboratory *Units: 4*

Political Science Minor

Minor Requirements (24 units)

The minor consists of 24 units of Political Science courses of which at least 16 units must be in upper division. The purpose of the Minor in Political Science is to provide a general background in political science to complement majors in such areas as business administration, environmental studies, science, humanities, and the other social sciences. The student should consult with a Political Science department advisor or the chairperson in selecting courses.

Psychology Minor

Minor Requirements (29-35 units)

The minor in Psychology is designed to provide a general background in psychology to complement training for careers in business and industry, biology, the medical professions, law or criminology, communication, and many other professions. See a psychology department advisor for help in selecting courses to complement your program. The minor consists of 29-35 units.

One of the following courses:

- PSYC 1000 - General Psychology *Units: 5*
- PSYC 1001 - General Psychology and Society *Units: 5*
- PSYC 1005 - General Psychology for Healthier Living *Units: 5*

One of the following courses:

- PSYC 1100 - Critical Thinking in Psychology *Units: 4*
- PSYC 2020 - Methods of Investigation in Psychology *Units: 4*

Twenty additional units

Twenty additional units selected from courses meeting the Elective Requirements in the description of the B.A. major, or PSYC 3100 plus 12 additional units from courses meeting these Elective Requirements. (Notice that PSYC 3100 has 8-9 additional units of prerequisites. See the course description.)

Recreation Minor

Minor Requirements (28 units)

I. Core Courses (16 units)

- REC 1000 - Introduction to Recreation *Units: 4*
- REC 2200 - Programming in Leisure Services *Units: 4*
- REC 3000 - Philosophy of Leisure *Units: 4*
- REC 4050 - Social Justice in Hospitality, Recreation and Tourism *Units: 4*

II. Electives (12 units)

Select three courses from the following:

- REC 2400 - Leisure, Self, and Society *Units: 4*
- REC 2500 - Service Learning in Leadership, Hospitality and Leisure 1 *Units: 1-4*
- REC 3010 - Service Learning in Hospitality, Recreation and Tourism 2 *Units: 4*
- REC 3200 - Wellness Through Leisure *Units: 4*
- REC 3202 - Women and Leisure *Units: 4*
- REC 3800 - Introduction to Recreation Therapy *Units: 4*
- REC 4000 - Administration and Budgeting in Recreation *Units: 4*
- REC 4011 - Youth Development through Leisure *Units: 4*
- REC 4100 - Professional Issues in Hospitality, Recreation and Tourism *Units: 2*
- REC 4300 - Facilities Management and Administration in Leisure *Units: 4*

Sign Language Minor

Minor Requirements (24-36 units)

A. Lower Division (12-24 units)

- MLL 1901 - Elementary Sign Language I *Units: 4*
- MLL 1902 - Elementary Sign Language II *Units: 4*
- MLL 1903 - Elementary Sign Language III *Units: 4*
- MLL 2901 - Intermediate Sign Language I *Units: 4*
- MLL 2902 - Intermediate Sign Language II *Units: 4*
- MLL 2903 - Intermediate Sign Language III *Units: 4*

Note:

Lower division requirements will be waived for student with prior knowledge of the language. See the "Advanced Placement" section above.

B. Upper Division (12 units)

- MLL 3902 - Deaf Culture *Units: 4*
- MLL 3903 - Topics in American Sign Language *Units: 4*
- MLL 3904 - Sign Language: Field Work *Units: 4*

Sociology Minor

Minor Requirements (28 units)

The minor consists of 28 units and must be declared by the end of Junior year.

I. Lower Division (4 units)

- SOC 1000 - Introduction to Sociology *Units: 4*
or
- SOC 1002 - Introduction to Sociology of Individual and Society *Units: 4*

II. Upper Division (8 units)

- SOC 3000 - Introduction to Sociological Research *Units: 4*
- SOC 3310 - Sociological Theory *Units: 4*

III. Electives (16 units)

Select 16 units from any other 3000 or 4000 level sociology courses. (Any Statistics course may be substituted for one Sociology course.)

Software Development Minor

Minor Requirements (36 units)

I. Required Courses (28 units)

- CS 1160 - Introduction to Computer Science I *Units: 4*
- CS 2360 - Introduction to Computer Science II *Units: 4*
- CS 2370 - Introduction to Computer Science III *Units: 4*
- MATH 1304 - Calculus I *Units: 4*
- MATH 2150 - Discrete Structures *Units: 4*
- CS 3240 - Data Structures and Algorithms *Units: 4*¹
- CS 4310 - Software Engineering I *Units: 4*

II. Choice of two courses from the following (8 units):

- CS 3340 - Introduction to Object-Oriented Programming and Design *Units: 4*
- CS 3520 - Web Site Development *Units: 4*
- CS 3560 - Introduction to Systems Programming *Units: 4*
- CS 4660 - Database Architecture *Units: 4*

Footnote

1. Has a prerequisite not included in the minor.

Spanish Minor

Minor Requirements (24-48 units)

A. Lower Division (0-24 units)

- MLL 1401 - Elementary Spanish I *Units: 4*
- MLL 1402 - Elementary Spanish II *Units: 4*
- MLL 1403 - Elementary Spanish III *Units: 4*
- MLL 2401 - Intermediate Spanish I *Units: 4*
- MLL 2402 - Intermediate Spanish II *Units: 4*
- MLL 2403 - Intermediate Spanish III *Units: 4*

Note:

Lower division requirements will be waived for student with prior knowledge of the language. See the "Advanced Placement" section above.

B. Upper Division (16 units)

- MLL 3401 - Advanced Spanish Composition and Syntax, I *Units: 4*
- MLL 3402 - Advanced Spanish Composition and Syntax, II *Units: 4*
- MLL 3403 - Advanced Spanish Composition and Syntax, III *Units: 4*
- MLL 3411 - Introduction to Spanish Linguistics *Units: 4*

C. One course from each of the two following areas:

Spanish Peninsular literature:

- MLL 4455 - Studies in the Golden Age of Spain *Units: 4*
- MLL 4460 - Studies in 20th Century Spanish Literature *Units: 4*

Spanish-American literature:

- MLL 3461 - Introduction to Spanish-American Literature: 1492 to 1900 *Units: 4*
- MLL 3463 - Introduction to Spanish-American Literature: 1900 to the Present *Units: 4*
- MLL 3495 - Spanish-American Culture and Civilization *Units: 4*
- MLL 4495 - A Single Movement, Country or Theme: Spanish American Literature *Units: 4*
- MLL 3400 - Introduction to Literary Analysis *Units: 4* may replace one of the above required courses.

Speech Pathology and Audiology Minor

Minor Requirements (32 units)

The minor consists of 32 units.

- COMM 1004 - Interpersonal Communication *Units: 4*
- SPPA 3852 - Speech, Language and Communication Development Across the Lifespan *Units: 4*
- SPPA 3854 - Anatomy and Physiology of Speech *Units: 4*
- SPPA 3855 - Phonetics *Units: 4*
- SPPA 3859 - Theory and Practice of Audiology I *Units: 4*
- SPPA 4854 - Diagnosis of Speech and Language Disorders *Units: 4*
- Select 4 units of upper-division coursework covering Aural Rehabilitation, with consent of advisor *Units: 4*
- Select 4 units of upper-division coursework covering Human Communication Theory, with consent of advisor *Units: 4*

Statistics Minor

Minor Requirements (24-25 units)

The minor consists of 24-25 units; six courses not involving calculus prerequisites approved for all students in the minor are as follows:

One of the following courses:

- STAT 1000 - Elements of Probability and Statistics *Units: 5*
- STAT 2010 - Elements of Statistics for Business and Economics *Units: 5*
- STAT 3031 - Statistical Methods in Biology *Units: 4*

Five of the following:

- STAT 3010 - Statistical Methods in the Social Sciences *Units: 4*
- STAT 3050 - Statistics: from Data to Decisions *Units: 4*
- STAT 3510 - Sampling Procedures for Surveys *Units: 4*
- STAT 3900 - Data Analysis Using Statistical Packages *Units: 4*
- STAT 3910 - Statistical Software Usage *Units: 4*
- STAT 4000 - Analysis of Variance in the Behavioral Sciences *Units: 4*
- STAT 4515 - Applied Multivariate Analysis *Units: 4*
- STAT 4601 - Regression *Units: 4*
- STAT 4610 - Introduction to Nonparametric Statistical Methods *Units: 4*

Note:

With the consent of a Statistics Department advisor, any upper division Statistics course with a calculus prerequisite may be substituted for any of the above courses.

Theatre Minor

Minor Requirements (34 units)

A. Fundamental Courses (9 units)

- THEA 2035 - Fundamentals of Acting *Units: 3*

Take six courses from the following

- Take six courses from the following. Transfers may substitute one course of up to three units on a course-for-units basis *Units: 6* THEA 2421-2430
Fundamental Backstage Technology (1 each)
- THEA 2421 - Fundamental Backstage Technology: Wood Scenery: Walls and Levels *Units: 1*
- THEA 2422 - Fundamental Backstage Technology: Costume Technique *Units: 1*
- THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus *Units: 1*
- THEA 2424 - Fundamental Backstage Technology: Sound: Recording *Units: 1*
- THEA 2425 - Fundamental Backstage Technology: Stage Effects *Units: 1*
- THEA 2428 - Fundamental Backstage Technology: Sound: PA *Units: 1*
- THEA 2429 - Fundamental Backstage Technology: Practical Drafting and Model Building *Units: 1*
- THEA 2430 - Fundamental Backstage Technology: Practical Make-up *Units: 1*

B. Core Courses (19 units)

- One introductory course with consent of advisor *Units: 4*
- THEA 3253 - Theatre Through the Ages *Units: 4*
- THEA 3254 - Scenery, Lights, and Sound Concepts *Units: 4*
- THEA 3255 - Costumes and Makeup Concepts *Units: 4*
- THEA 3256 - Directing: Text to Stage *Units: 3*

C. Performance and Production Courses (minimum 6 units)

Three production assignments/courses required. For each assignment, enroll for a minimum of two (2) units each from Theatre Production Activity courses by advisement. Transfers may apply only one production course taken at another institution.

Urban Studies Minor

Minor Requirements (24 units)

The minor in Urban Studies consists of a minimum of 24 units of work selected from the following lists of courses. No more than 9 units of work in a single department may be applied to the minor. With the approval of an Urban Studies advisor, a maximum of 2 other appropriate courses, including independent study or directed research, may be substituted for those below.

- ANTH 4310 - Field Course in Ethnography *Units: 5*
- CRJA 4700 - Community Based Corrections *Units: 4*
- ECON 3370 - Public Sector Economics *Units: 4*
- ECON 3500 - Urban Economics *Units: 4*
- ENVT 4100 - Environmental Impact Analysis *Units: 4*
- ENVT 4300 - Environmental Field Studies *Units: 5*
- ES 3290 - Community Development *Units: 4*
- GEOG 4325 - Field Course in Cultural-Urban Geography *Units: 4*
- HIST 3503 - History of the San Francisco Bay Area *Units: 4*
- POSC 3120 - State and Local Politics and Government *Units: 4*
- POSC 3130 - Urban Politics *Units: 4*
- POSC 3150 - Politics of California *Units: 4*
- POSC 3800 - Public Policy Analysis *Units: 4*
- PUAD 4800 - Public Administration and Society *Units: 4*
- REC 4300 - Facilities Management and Administration in Leisure *Units: 4*
- SOC 3520 - Sociology of Race and Ethnic Relations *Units: 4*
- SOC 3700 - Introduction to Social Services *Units: 4*
- SOC 3710 - Social Policy *Units: 4*
- SOC 4450 - Urban Sociology *Units: 4*

Note:

Any new or transfer course judged by an Urban Studies advisor to have a significant urban studies content.

At least 18 units in the minor must be outside the student's major department

Women's Studies Minor

Program Description

Mission Statement

Women's Studies explores theoretical and empirical approaches to the study of women across a range of contexts. Courses connect academic work with the social and political world outside the University, educate our students about a range of social issues and problems that relate to sexism, racism, classism, heterosexism, and ethnocentrism; and link knowledge, research, teaching, and social activism. We immerse students in the discovery and production of knowledge that emerges from multiple perspectives. We engage students in the study of gender and the intersection of gender with other substantive categories of analysis and identity, including race, sexuality, class, (dis)ability, and nationality. We promote responsible citizenship in a diverse local and global environment. We empower students to think more critically about their own lives and to critique social, cultural, and institutional structures, policies and practices.

Undergraduate courses in Women's Studies ensure that students receive an interdisciplinary education that bridges theory and practice, and focuses on the intersections of gender, race, class, sexuality, and nationality in all areas of research. Electives in the social sciences, sciences, and humanities increase the interdisciplinary strength of the program.

Goals

- To provide students with the theoretical and methodological tools needed to examine the intersections of gender with other forms of difference and power, such as sexuality, race, class, and nation, in local and transnational contexts
- To provide a forum for intellectual debate and a catalyst for students committed to social action which addresses various forms of social injustice
- To provide fieldwork placements which culminate in a senior thesis
- To build supportive local community environments for women by disseminating fieldwork research findings back to the community

Career Opportunities

The Women's Studies program is excellent preparation for life, and careers and graduate study in a wide range of fields, including government and public policy, non-profit and social justice organizations, law, educational institutions, and many other professional and human-service fields.

Features

Women's Studies is an interdisciplinary area of scholarship and research and raises questions which have often been ignored or marginalized in traditional academic disciplines. Our Program builds on several decades of feminist work in women's studies and deliberately integrates theory, research methods and service learning.

The courses in Women's Studies emphasize participatory education in which student involvement, critical thinking, and personal insight are encouraged and made relevant in the learning process. In this Program, theory and practice are combined creatively and productively. Research, fieldwork, and service are central to the process of learning and applying knowledge. The Program stresses the importance of social responsibility, political activism, and community outreach. The curriculum explores how institutionalized sexism, racism, classism, and heterosexism limit human achievement and dignity. Local service learning fieldwork provides an opportunity to examine first-hand the changes necessary to eliminate these limitations.

Service learning fieldwork enables students to create richly detailed accounts of women as social agents whose identities and experiences are shaped by social, political and economic forces. Service learning is incorporated into the program through fieldwork in community agencies focused on advocacy, law and policy, reproductive rights and health, support services for survivors of violence and abuse, and U.S. politics.

As part of its mission to educational access for all students, particularly to students with paid work and care work commitments, the Program incorporates a broad range of educational formats including online classes, hybrid classes that combine an online component with face-to-face interaction, and face-to-face lecture/discussion and seminar classes.

Minor Requirements (24 units)

No more than six units in the major department, nor more than 8 units of lower division courses may be applied to the minor. No more than four units may be taken on a "CR/NC" basis. Altogether, 24 units are required. Students who wish to minor in Women's Studies should see the coordinator as soon as possible.

I. Core Courses (8-12 units)

- WOST 1001 - Perspectives on Women *Units: 4*
- WOST 1002 - Women in Contemporary Society *Units: 4*

II. Electives in Women's Studies (8-12 units)

Two or three courses with special reference to the status and problems of women selected from:

- COMM 4500 - Gender Identity and Representation in Media *Units: 4*
- ENGL 3650 - Women and Literature *Units: 4*
- HIST 3124 - Women in Classical Antiquity *Units: 4*
- HIST 3571 - Women in American History *Units: 4*
- POSC 3340 - Women and Politics *Units: 4*

- PSYC 3410 - Psychology of Women *Units: 4*
- SOC 3411 - Sociology of Gender *Units: 4*
- WOST 3050 - Feminist Theory *Units: 4*
- WOST 3400 - Women and Careers *Units: 4*
- WOST 3420 - Minority Women in America *Units: 4*
- WOST 3520 - Mothers, Daughters, and Sons *Units: 4*
- WOST 3530 - Women and Their Bodies *Units: 4*
- WOST 4900 - Independent Study *Units: 1-4*

III. Elective in a Related Field

Four units should be selected with an advisor in Women's Studies from the following:

If not used to complete requirement II above.

- COMM 4500 - Gender Identity and Representation in Media *Units: 4*
- ENGL 3650 - Women and Literature *Units: 4*
- HIST 3124 - Women in Classical Antiquity *Units: 4*
- HIST 3571 - Women in American History *Units: 4*
- PSYC 3410 - Psychology of Women *Units: 4*
- SOC 3411 - Sociology of Gender *Units: 4*
- WOST 3400 - Women and Careers *Units: 4*
- WOST 3420 - Minority Women in America *Units: 4*
- WOST 3520 - Mothers, Daughters, and Sons *Units: 4*
- WOST 3530 - Women and Their Bodies *Units: 4*
- WOST 4900 - Independent Study *Units: 1-4*

Anthropology

- ANTH 3110 - Primate Social Behavior *Units: 4*
- ANTH 3400 - Social Anthropology *Units: 4*
- ANTH 3740 - Cross-Cultural Studies in Child-Rearing *Units: 4*
- ANTH 3745 - Human Sexuality: Anthropological Perspectives *Units: 4*

Biology

- BIOL 3060 - Human Sexuality *Units: 4*

General Ethnic Studies

- ES 3000 - Ethnic Writers *Units: 4* (when emphasis is on women writers)
- ES 3810 - History of Minority Education *Units: 4*

History

- HIST 4710 - History and Trends in Nursing *Units: 4*

Kinesiology

- KIN 1018 - Beginning Activities: Self Defense-Women *Units: 1*

Modern Language and Literatures

- MLL 4495 - A Single Movement, Country or Theme: Spanish American Literature *Units: 4* (when the theme focuses on women)

Philosophy

- PHIL 3510 - Human Rights and Social Justice: Cultural Groups and Women in the U.S. *Units: 4*
- PHIL 3720 - Feminist Philosophy *Units: 4*

Psychology

- PSYC 3520 - Interpersonal Processes *Units: 4*
- PSYC 3540 - Groups and Organizations *Units: 4*
- PSYC 4420 - Developmental Psychology *Units: 4*
- PSYC 4610 - Psychology of Personality *Units: 4*

Sociology

- SOC 3410 - Sociology of the Family *Units: 4*
- SOC 3415 - Sociology of the African American Family *Units: 4*
- SOC 3416 - Sociology of the Mexican American Family *Units: 4*
- SOC 3500 - Social Psychology *Units: 4*

Note:

It is recommended that all students in the minor take at least one course that has a primary focus on minority women in America.

Other Elective Courses

Other elective courses (with appropriate content) may be approved by the Women's Studies Committee as they are developed by departments.

Master

Accountancy, M.S.

Program Coordinator:

Nancy Mangold, Chair and Professor, Department of Accounting and Finance

University Extension:

Balvinder Kumar, Special Sessions Coordinator

Mission Statement

The mission of the Master of Science in Accountancy program is to provide students with a high quality accounting program that prepares students to have the required education qualifications for entry into the accounting profession. Through our program, students will learn to make ethical choices and will contribute to the vitality of the East Bay, the state and global communities. The M.S. in Accountancy Program is a cohort-based, one year (4-quarters) graduate program. Graduates of the program will satisfy the accounting education requirements for the CPA examination and for the 150 hour California CPA licensure requirement.

Student Learning Outcomes:

Students graduating with a Master of Science in Accountancy will be able to:

1. Demonstrate the required knowledge of U.S. and international financial reporting standards, government and not-for-profit accounting standards, U.S. and international auditing standards, corporate tax, and ethics and regulations.
2. Think critically and apply quantitative reasoning skills to analyze financial reports, perform risk analysis, construct business valuation models using spreadsheets and statistical analyses, and assess the internal control functions and perform attestation tasks.
3. Demonstrate knowledge of up-to-date government laws and regulations and the code of conduct and ethics for professional accountants, detect and analyze situations that might be unethical or a violation of professional standards, and will demonstrate a solid defense of a reasonable solution to an ethical issue and communicate a concise and articulate recommendation.
4. Apply written communication skills to produce professional accounting reports and demonstrate the ability to prepare and deliver a well-organized, informative and persuasive oral presentation within a professional context.
5. Apply professional collaboration skills in working with individuals and in groups.

Career Opportunities

Graduates of the M.S. in Accountancy program can pursue a wide range of professional accounting careers in public accounting, industry, government and not-for-profit organizations.

Admission

The Master of Science in Accountancy program is a cohort based, one year (4 quarters) program. Students with a baccalaureate degree in any subject from an accredited college or university may apply. Work experience is desirable, but not required. To be considered for admission to the M.S. in Accountancy program, each applicant is evaluated on the basis of:

1. Past academic performance as reflected in undergraduate grade point average and subsequent coursework;
2. Results of the Graduate Management Admissions Test (GMAT) in verbal, quantitative, and the "Index Score" that involves the total GMAT score, $\text{Index Score} = (\text{Upper Division GPA} \times 200) + \text{Total GMAT}$. Equivalent GRE scores or have passed the U.S. C.P.A. Examination are considered in place of GMAT;
3. For international students: demonstrated proof of English proficiency in one of the following ways:
 - a. An official transcript showing graduation with a bachelor's degree from a U.S. college or university, or an international college or university where English is the principal language of instruction, or an official letter from the college or university certifying that English was the language of instruction.
 - b. A TOEFL (Test of English as a Foreign Language) score of 550 (213 computer-based or 79 Internet-based) or above.
 - c. An overall test score from IELTS (International English Language Testing System) exam of 6.5 or above for graduate students.

Proficiency

All M.S. in Accountancy program students must fulfill the University Writing Skills Requirement (UWSR). The Writing Skills Requirement could be met as an undergraduate or graduate student at one of the CSU system campuses, with a score of 4.5 or better on the GMAT essay, by passing the Writing Skills Test (WST), or through coursework. Information about the Writing Skills Test and the courses can be found on the Testing Office website. The Website contains information on test dates, registration procedures and fees. Further information can be obtained from the Testing Office, Library, Room LI 3165A, phone 510-885-3661. If students have not satisfied the UWSR before they begin their graduate work, they must either take the WST or enroll in a first tier course by the end of their first quarter in the program.

Requirements for Graduation

To be eligible for the M.S. in Accountancy, a student must have been Advanced to Candidacy (see Graduate Degree Information chapter of the catalog) and have completed 45 quarter units meeting the following criteria:

- Have a combined 3.0 grade point average (minimum) in all units taken to satisfy the requirements of the student's degree program.
- All have a course grade of "C" or better.
- All units earned within the five years immediately preceding the completion of the requirements for the degree.
- Have completed a satisfactory program of study, defined below.

I. Foundation Courses (0-16 units)

In order to be considered for "Classified Graduate" standing in the Master of Science in Accountancy program, a student must satisfy the following undergraduate courses or equivalent:

- ACCT 2251 - Introduction to Financial Accounting *Units: 4*
- ACCT 2253 - Introduction to Managerial Accounting *Units: 4*
- ACCT 3170 - Accounting Information Systems I *Units: 4*
- ACCT 3220 - Tax Accounting: Fundamentals and Individuals *Units: 4*

Foundation courses can be satisfied by courses taken in an undergraduate program with a grade "B-" or better within the last five years.

II. Core Courses (24 units)

Core courses are required of all students enrolled in the M.S. in Accountancy program.

- ACCT 6202 - Corporate Tax *Units: 4*
- ACCT 6560 - Financial Statement Analysis and Business Valuation *Units: 4*
- ACCT 6630 - Governmental and Not-for-profit Accounting *Units: 4*
- ACCT 6640 - Auditing Theory and Practice I *Units: 4*
- ACCT 6650 - Auditing Theory and Practice II *Units: 4*
- ACCT 6660 - Accountants' Ethics and Professional Responsibilities *Units: 4*

III. Elective Courses (20 Units by advisement)

- Any 6000 level graduate accounting courses not taken as the core courses.
- FIN 6310 - Seminar in Security Analysis and Portfolio Management *Units: 4*
- FIN 6315 - Seminar in Options and Futures *Units: 4*
- FIN 6325 - Financial Management of Banking Institutions *Units: 4*
- MGMT 6225 - Executive Leadership *Units: 4*
- MKTG 6120 - Managerial Communication *Units: 4*

The following courses are recommended for students with a non-accounting undergraduate degree:

- ACCT 6611 - Financial Reporting and IFRS I *Units: 4*
- ACCT 6612 - Financial Reporting and IFRS II *Units: 4*
- ACCT 6613 - Financial Reporting and IFRS III *Units: 4*
- ACCT 6620 - Advanced Topics in Financial Accounting *Units: 4*
- ACCT 6670 - Business Law and Regulations *Units: 4*

Capstone Project (1 unit)

- ACCT 6899 - Project *Units: 1*

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website or call 510.885.3661.

Transfer of Courses

Upper division prerequisite and foundation and graduate courses will only be considered for equivalency or transfer credit if they are from AACSB accredited institutions. Exceptions will be made for programs that have current and signed agreements with the College of Business and Economics.

Anthropology, M.A.

Program Description

The university offers the Master of Arts degree in Anthropology. Anthropology is the multifaceted study of humanity from an evolutionary, historical and global perspective. Students in anthropology learn about their own culture as well as those of other peoples as they are shaped by biological evolution, ecological constraints, political history, and sociological conditioning. The Department of Anthropology offers ethnographic, theoretical and methodological courses in five sub-disciplines: biological anthropology, prehistory and archaeology, anthropological linguistics, socio-cultural anthropology, and applied anthropology. The department has faculty with expertise in the heritage cultures of North and South America and Asia. Although there are no separate options in the program, students are expected to focus their interests in any two academic sub-fields of the discipline: socio-cultural, archaeological, biological, or linguistic anthropology. The department fosters a learning experience across applied and academic domains.

Student Learning Outcomes

Students graduating with an M.A. in Anthropology from Cal State East Bay will be able to:

1. summarize the history of anthropology; explain how and why the four fields of anthropology intersect; and characterize and critique current debates in the discipline;
2. compare and appraise the major theoretical approaches in one or two subfields of anthropology;
3. identify appropriate uses of anthropological methods and content in real-world problems, and use these to form the basis of intellectual argumentation;
4. design or develop and implement ethnographic, archaeological or osteological research protocols, and
5. communicate findings by composing high-quality reports or papers on their own.

Career Opportunities

- Community College Teacher
- Anthropologist
- Archaeologist
- Artifacts Conservator
- Curator
- Ethnologist
- Foreign Service Officer
- Immigration Service Officer
- International Business
- Multicultural Education Instructor
- Museum Curator
- Park Ranger
- Park Service Official
- Professor/Teacher
- Researcher
- Social Science Teacher
- Travel Consultant
- Urban Planner

Research Facilities

The Clarence E. Smith Museum of Anthropology houses a sizable collection of archaeological artifacts recovered in Alameda and Contra Costa Counties, as well as collections of culture groups throughout the world. The public museum is administered by the department and is also used as an

instructional facility. Students have an opportunity for "hands-on" experience in museum work and gallery exhibits, and through related courses in museology and cross-cultural art. The museum, housed in Meiklejohn Hall, is open to the public. For information, call (510) 885-3168 or (510) 885-3104.

Research Support and Teaching Opportunities

There are a small number of teaching and teaching-related opportunities, in both classroom and online instruction, available within the department for qualified students, including positions as Teaching Assistants, Readers, and Graduate Writing Instructors. Cal State East Bay offers opportunities for practical training and a few paid internships through its Cooperative Education Program. In the past, anthropology graduate students have obtained internships at places in the Bay Area and as far away as the Smithsonian Institution.

Admission to the Program

To be admitted to the program with "Conditionally Classified Graduate" status, the student must: (1) meet all Cal State East Bay requirements for admission to the university as a post-baccalaureate student; (2) have a grade point average of at least 2.50 in his or her last 90 quarter (60 semester) units; (3) file a written application with the department (in addition to the official application filed with the Admissions Office); and (4) submit two letters of recommendation for admission to the program from current or former professors.

Classification in the Program

"Classified Graduate" status implies that the student has demonstrated adequate preparation to pursue graduate work leading to the M.A. degree in Anthropology. Credit can be granted for necessary courses taken with graduate standing at other institutions; deficiencies, if any, can be corrected while registered as a "Conditionally Classified Graduate" student in the program. It should be noted that not more than 15 units of graduate level course work (6000 series) in Anthropology taken as a "Conditionally Classified Graduate" student will be applicable to M.A. degree requirements. To attain "Classified Graduate" status, either at the time of admission or thereafter, a student must: (1) have completed a baccalaureate degree with a major in Anthropology which includes the following anthropology courses or their equivalents: ANTH 3100 or ANTH 3101, ANTH 3200, ANTH 3400, ANTH 3800 or 3810, ANTH 4250 or ANTH 4310, ANTH 4910; (2) satisfy the University Writing Skills requirement.

Advancement to Candidacy

Advancement to Candidacy implies that the student has demonstrated the capacity to complete satisfactorily the program leading to an M.A. degree in Anthropology. To be Advanced to Candidacy, a student must file with the department (normally upon completion of 23 course units) an approved program of study to include relevant courses satisfactorily completed, those in progress, and those yet to be taken; and then be recommended for Advancement to Candidacy by the department.

Maintenance of "Classified Graduate" Standing

To maintain "Classified Graduate" standing a grade point average of 3.0 or higher must be achieved in all courses taken in the approved program of study, whether at Cal State East Bay or at any other college or university. If a "Classified Graduate" student's GPA falls below 3.0, s(he) shall be dropped from candidacy, if previously attained, and placed in "Conditionally Classified Graduate" status until all deficiencies have been remedied and the student is recommended by the department for reinstatement to "Classified Graduate" status (and candidacy when applicable). Failure by a student to return to "Classified Graduate" status following completion of 16 additional quarter units shall result in his or her dismissal from the program.

Requirements for the M.A. in Anthropology (45 units)

I. Requirements for Advancement to Candidacy

- A. Acquire a research skill by successfully completing one year of coursework or equivalency (or demonstrating competence) in one of the following: (1) a foreign language relevant to your area of study, (2) computer and/or multimedia skills, (3) statistics. Students should seek departmental approval of the specific research skill.
- B. Complete a minimum of 23 units of anthropological coursework applicable to M. A. requirements, including at least 15 units of graduate-level (6000 series) coursework.

II. Course Requirements

A. Complete 45-46 quarter units of graduate work including the 23 units needed for Advancement to Candidacy.

1. All must be earned within the five years just preceding the completion of the requirements for the degree.
2. Not fewer than 32 must be completed in residence.
3. Not fewer than 26 must be in anthropology courses in the 6000 series.
4. Not more than 13 may be taken in "Unclassified Post-baccalaureate" status and/or for extension and/or transfer course credit, as approved by the department.

B. Required Courses (25-28 units)

1. All students are required to select:

- ANTH 6350 - Advanced Ethnographic Methods *Units: 5*
Or
- ANTH 6251 - Advanced Archaeological Field Methods *Units: 5*

Or
- ANTH 6260 - Graduate Osteology *Units: 1*
and
 - ANTH 4280 - Forensic Osteology *Units: 4*

2. Students following the Comprehensive Exam or Thesis Tracks must complete

- ANTH 6700 - Applied Anthropology *Units: 4*

and any four of the following:

- ANTH 6100 - Seminar in Biological Anthropology *Units: 4*
- ANTH 6200 - Seminar in Archaeology/Prehistory *Units: 4*
- ANTH 6400 - Seminar in Socio-Cultural Anthropology *Units: 4*
- ANTH 6800 - Seminar in Linguistic Anthropology *Units: 4*
- ANTH 6999 - Issues in Anthropology *Units: 4*

3. Students following the Applied Anthropology Track must complete

- ANTH 6700 - Applied Anthropology *Units: 4*
- ANTH 6760 - Internship Experience *Units: 4*
- ANTH 6770 - Internship Planning and Analysis *Units: 4*

and any two of the following:

- ANTH 6100 - Seminar in Biological Anthropology *Units: 4*
- ANTH 6200 - Seminar in Archaeology/Prehistory *Units: 4*

• ANTH 6400 - Seminar in Socio-Cultural Anthropology *Units: 4*
or
- ANTH 6800 - Seminar in Linguistic Anthropology *Units: 4*
or
- ANTH 6999 - Issues in Anthropology *Units: 4*

C. Elective courses (graduate or upper division)

Elective courses (graduate or upper division) in Anthropology (or outside of Anthropology in one or more closely related fields) taken as a graduate student. Choice of appropriate coursework will be made with consent of Graduate Advisor. Students in the Comprehensive Exam Track must have completed at least two upper division courses (or their equivalent) in each of the fields in which they take their exams. All units used to fulfill comps requirements must be included as elective units. Students in the Applied Anthropology Track are strongly advised to complete at least one course in statistics. (16 units)

D. Capstone Experience (1-5 units)

Complete one of the following:

1. Comprehensive Exam Track:

- ANTH 6905 - Directed Readings in Anthropology *Units: 1-5* and pass a comprehensive examination in two sub-fields of anthropology.

Before enrolling in ANTH 6905 students must (a) declare the two sub-fields from socio-cultural, biological, archaeological, and linguistic anthropology in which they intend to take their examination, (b) have taken at least 8 units of upper division coursework within each of the chosen fields, and (c) have the approval of the Department Graduate Coordinator.

The examination may be taken only after Advancement to Candidacy and the completion of the appropriate core seminars

- ANTH 6100 - Seminar in Biological Anthropology *Units: 4*
- ANTH 6200 - Seminar in Archaeology/Prehistory *Units: 4*
- ANTH 6400 - Seminar in Socio-Cultural Anthropology *Units: 4*
- ANTH 6800 - Seminar in Linguistic Anthropology *Units: 4*

2. Applied Anthropology Track:

- ANTH 6909 - Departmental Thesis *Units: 1-4* in conjunction with
- ANTH 6770 - Internship Planning and Analysis *Units: 4*

3. Thesis Track:

- ANTH 6910 - University Thesis *Units: 1-5*

E. Have a 3.00 or higher GPA in all courses applied to the M.A. degree.

Have a 3.00 or higher GPA in all courses applied to the M.A. degree. See also the Applying for Graduation in the Graduate Degree Information chapter in this catalog.

Comprehensive Exam, Thesis Track, and Applied Anthropology Track

Students may choose to complete ANTH 6905 and pass a comprehensive examination on any two fields from socio-cultural, biological, archaeological, and linguistic anthropology. Normally the exam will be given twice a year, in the Fall and Spring quarters. With the consent of the department faculty and the approval of the Graduate Coordinator, students may elect to enroll in ANTH 6910, and undertake and satisfactorily complete a University Thesis under the supervision of a committee of at least two faculty members from the department. Students in the Applied Anthropology Track must enroll in ANTH 6909 - Departmental Thesis.

Courses Acceptable for the Master's Degree

In addition to graduate level (6000 series) courses, all Anthropology courses in the 3000-4000 series (except ANTH 3000) are acceptable in the master's degree program. Only courses with grades of "A," "B," and "C" are considered applicable to degree requirements. To apply a course to the degree in which a "D" or "F" is received, the student must repeat the course and earn a grade of "C" or higher. However, both the original grade and the repeat grade are utilized in calculating the student's graduate grade point average.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Biological Science, M.A.

M.S. and M.A. in Biological Science

The Master of Science and Master of Arts degrees in Biological Science offers students the opportunity to obtain advanced academic and research experience in specialized areas of biological science. The program prepares students for careers or further education in the biological sciences.

Biological science is a fast-changing, exciting field offering students numerous options for rewarding careers and scientific advancement. The M.S. in Biological Science is a research-based thesis program that provides students with opportunities to develop and complete research projects and experiences to enhance advancement and career opportunities in biology. The M.A. in Biological Science is a coursework (nonthesis) program with a comprehensive examination as the culminating experience. Both the M.S. and the M.A. programs require 45 quarter units of coursework.

Student Learning Outcomes

Students graduating with an M.S. or M.A. in Biological Science from Cal State East Bay will be able to:

1. demonstrate a broad and sophisticated understanding that contributes to biological concepts and principles across all levels of biological organization, from ions to ecosystems;
2. demonstrate expertise in a specific area of biological science;
3. independently apply the scientific method to formulate testable biological hypotheses, analyze empirical data, and synthesize the results of the analysis;
4. clearly communicate the design and results of an observational or experimental analysis in a variety of formats, including the graduate thesis, scientific paper, scientific poster, and oral presentation;
5. gather and evaluate primary scientific literature and judge the value of the information presented in relation to particular biological questions.

Career Opportunities

Students interested in careers that involve research or interested in pursuing a Ph.D. should consider the M.S. degree in Biological Science. Examples of M.S. study areas in the department are environmental biology, ecology, population biology, marine biology, physiology, neurobiology, cell and molecular biology, microbiology, genetics, and virology. Students interested in career advancement in fields that do not involve research, such as teaching, management, or health professions (including dental, medical, pharmacy, or veterinary practice) should consider the M.A. degree in Biological Science.

Faculty

The Biological Science faculty is comprised of 14 full-time professors at Cal State East Bay. The faculty are committed to excellence in teaching and research, and many of the faculty have federal, state, and private research grant support.

Related Programs

The Biotechnology Certificate Program within the department is a post-baccalaureate program emphasizing molecular and cellular techniques. For more information about the Biotechnology Certificate Program refer to the Certificate in Biotechnology section of this chapter. The M.S. degree in Marine Science is offered at Moss Landing Marine Laboratories (MLML), located on Monterey Bay, for students from Cal State East Bay and seven other California State University consortium schools. Graduate students from Cal State East Bay majoring in other areas of study may also take such courses at Moss Landing as are appropriate for their degree objectives. Contact the Biological Sciences Department for application forms

and deadlines for this program. For more information on the M.S. in Marine Sciences refer to the Marine Science chapter in the graduate section of this catalog.

Research Facilities

Department facilities for student research and study include invertebrate, vertebrate, and entomology museums; herbarium; greenhouse; insectary; radiation hot lab; microbiology facilities; cell culture facilities; animal rooms; molecular biology labs; microscope facilities including phase, differential interference contrast and fluorescence microscopy; and DNA sequencing and cell storage facilities. Local field opportunities may be found at a wetlands field station at the San Francisco Bay National Wildlife Refuge, the brackish and salt water marshes of the Hayward Regional Shoreline of San Francisco Bay, and a 35-acre oak-grassland preserve located immediately adjacent to the Hayward Hills campus and contiguous with Garin Regional Park (one of the East Bay Regional Parks).

Research and Financial Support

Research space is available to all "Classified Graduate" students in the M.S. in Biological Science program, usually in the major advisor's research lab. Limited funds for graduate research supplies are available each year from the department budget. Graduate research grants are available annually on a competitive basis through Academic Programs and Graduate Studies and can be used to purchase supplies or pay travel expenses for graduate research. In addition, research assistantships are available for some students through faculty research grants. Teaching assistantships may become available for a given quarter. As financial aid within the department is limited, you may want to contact the Financial Aid Office regarding other assistance from the University Work-Study Program, loans, scholarships, etc.

Admission Requirements

- The M.S. and M.A. degree programs in the Department of Biological Sciences is open to graduates of accredited institutions who have a four-year baccalaureate degree in any field of the biological sciences and who have achieved a GPA of at least 2.75 in all undergraduate work and an average of 3.00 in all biological science courses taken as an upper division student. Normally, all applicants should have completed undergraduate courses equivalent to those required of all biological science majors at Cal State East Bay. Applicants must have taken basic courses in biological and physical sciences and mathematics/statistics; areas omitted, if any, will be treated as course deficiencies and must be completed by the time of classification (see below).
- In addition to filing the university application and fee, students must apply to the Department of Biological Sciences for admission to graduate standing in the M.S. or M.A. degree program. Application forms are available through the department office or by accessing the Biology Department website. In addition to the GPA requirements for admission mentioned in #1, the department requires that the following be sent directly to the Department of Biological Sciences:
 - departmental application
 - GRE General Test Scores (target scores are in the upper 30th percentile; significant deviation from target scores may be grounds for denial of admission)
 - three letters of reference
 - statement of purpose

Applicant files will not be reviewed or processed until the application file is complete; this is the applicant's responsibility. During the admission process, students interested in the M.S. program are encouraged to obtain information about research interests of the faculty and to contact faculty members who could potentially serve as thesis advisors.

- All students admitted to the program will be admitted as "Conditionally Classified Graduate" students.
- Those students applying for admission to the program with the intent of obtaining an M.S. degree in Marine Sciences from work done at Moss Landing Marine Laboratories must gain admission into "Conditionally Classified Graduate" status as stated above. However, the classification procedures as stated below WILL NOT apply for these students; instead, once admitted to the program as "Conditionally Classified Graduate" students, they will follow MLML's classification procedures (see the Marine Science chapter in the graduate section of this catalog).
- Any student not admitted to the program because of incomplete application, deficiency, or failure to meet deadlines is urged to enroll in the university as an "Unclassified Post-baccalaureate" student pending completion and/or reconsideration of the application for classification.
- No more than 13 quarter units of courses applicable toward the master's degree completed before admission to the program may be counted toward the degree.

Note: Although not an admission requirement, satisfaction of the University Writing Skills Requirement (UWSR) must begin during the first quarter of admission to the program and must be completed before a student can become a fully "Classified Graduate" student.

M.A. Requirements

A "Conditionally Classified Graduate" student must become a fully "Classified Graduate" student in the program as set forth in 1, 2, and 3 below, if applicable, within four quarters of acceptance into the Master's program or the "Conditional Classification" will expire and the student will be placed in "Unclassified Post-baccalaureate" status. It is the responsibility of the student to make sure these requirements are met within the specified time limits.

- Specify the area of proposed course and comprehensive exam specialization in writing to the Department of Biological Sciences. Examples of areas of specialization are available from the department or Graduate Coordinator.
- Complete basic course deficiencies. If the student lacks basic courses in biological or physical sciences, or mathematics/statistics, these courses must be completed by the end of the fourth quarter following admission to the program.
- University Writing Skills Requirement. The University Writing Skills Requirement must be satisfied. (See Graduate Degree Information chapter in this catalog.)

Advanced to Candidacy

The student must have:

- attained "Classified Graduate" standing
- completed at least 12 quarter units of satisfactory work beyond the baccalaureate degree suitable for inclusion in the M.A. program in Biological Science as approved by the graduate advisory committee. At least 3 quarter units of graduate level coursework in residence at Cal State East Bay must be included. (You must maintain a 3.00 GPA in the degree coursework to remain in good standing.)
- met with a faculty advisor in the student's area of course and comprehensive examination specialization to plan for the comprehensive examination.
- registered for 2 units of BIOL 6901 - Comprehensive Examination Preparation in the spring quarter of the year in which the comprehensive examination is to be completed.

M.A. Curricular Requirements (45 units)

A total of 45 quarter units is required beyond the baccalaureate with a GPA of 3.0 or above and no grade lower than "C" in courses included in the program, and with specific requirements as follows:

1. Graduate courses in Biology (21-43 units)

In area of specialization as approved by the student's graduate advisor; included must be at least one, but not more than two, graduate seminars in the area of special concentration.

May not include units of

- BIOL 6898 - Cooperative Education *Units: 1-4*
- BIOL 6900 - Independent Study *Units: 1-4*
- BIOL 6910 - University Thesis *Units: 1-9*

2. Upper division undergraduate Biology majors courses, (0-22 units)

Taken as a graduate student and approved by the advisory committee as appropriate to the student's objective.

3. Comprehensive Examination Preparation (2 units)

Taken in spring quarter in the final year of the program.

- BIOL 6901 - Comprehensive Examination Preparation *Units: 2*

4. Successful completion of comprehensive written examination in area of specialization in Biological Sciences.

Granting the Degree

Upon successful completion of the above requirements, the department will recommend that the candidate be granted the M.A. degree.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Biological Science, M.S.

M.S. and M.A. in Biological Science

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Biological science is a fast-changing, exciting field offering students numerous options for rewarding careers and scientific advancement. The M.S. in Biological Science is a research-based thesis program that provides students with opportunities to develop and complete research projects and experiences to enhance advancement and career opportunities in biology. The M.A. in Biological Science is a coursework (nonthesis) program with a comprehensive examination as the culminating experience. Both the M.S. and the M.A. programs require 45 quarter units of coursework.

Student Learning Outcomes

Students graduating with an M.S. or M.A. in Biological Science from Cal State East Bay will be able to:

1. demonstrate a broad and sophisticated understanding that contributes to biological concepts and principles across all levels of biological organization, from ions to ecosystems;
2. demonstrate expertise in a specific area of biological science;
3. independently apply the scientific method to formulate testable biological hypotheses, analyze empirical data, and synthesize the results of the analysis;
4. clearly communicate the design and results of an observational or experimental analysis in a variety of formats, including the graduate thesis, scientific paper, scientific poster, and oral presentation;
5. gather and evaluate primary scientific literature and judge the value of the information presented in relation to particular biological questions.

Career Opportunities

Students interested in careers that involve research or interested in pursuing a Ph.D. should consider the M.S. degree in Biological Science. Examples of M.S. study areas in the department are environmental biology, ecology, population biology, marine biology, physiology, neurobiology, cell and molecular biology, microbiology, genetics, and virology. Students interested in career advancement in fields that do not involve research, such as teaching, management, or health professions (including dental, medical, pharmacy, or veterinary practice) should consider the M.A. degree in Biological Science.

Faculty

The Biological Science faculty is comprised of 14 full-time professors at Cal State East Bay. The faculty are committed to excellence in teaching and research, and many of the faculty have federal, state, and private research grant support.

Related Programs

The Biotechnology Certificate Program within the department is a post-baccalaureate program emphasizing molecular and cellular techniques. For more information about the Biotechnology Certificate Program refer to the Certificate in Biotechnology section of this chapter. The M.S. degree in Marine Science is offered at Moss Landing Marine Laboratories (MLML), located on Monterey Bay, for students from Cal State East Bay and seven other California State University consortium schools. Graduate students from Cal State East Bay majoring in other areas of study may also take such courses at Moss Landing as are appropriate for their degree objectives. Contact the Biological Sciences Department for application forms and deadlines for this program. For more information on the M.S. in Marine Sciences refer to the Marine Science chapter in the graduate section of this catalog.

Research Facilities

Department facilities for student research and study include invertebrate, vertebrate, and entomology museums; herbarium; greenhouse; insectary; radiation hot lab; microbiology facilities; cell culture facilities; animal rooms; molecular biology labs; microscope facilities including phase, differential interference contrast and fluorescence microscopy; and DNA sequencing and cell storage facilities. Local field opportunities may be found at a wetlands field station at the San Francisco Bay National Wildlife Refuge, the brackish and salt water marshes of the Hayward Regional Shoreline of San Francisco Bay, and a 35-acre oak-grassland preserve located immediately adjacent to the Hayward Hills campus and contiguous with Garin Regional Park (one of the East Bay Regional Parks).

Research and Financial Support

Research space is available to all "Classified Graduate" students in the M.S. in Biological Science program, usually in the major advisor's research lab. Limited funds for graduate research supplies are available each year from the department budget. Graduate research grants are available annually on a competitive basis through Academic Programs and Graduate Studies and can be used to purchase supplies or pay travel expenses for graduate research. In addition, research assistantships are available for some students through faculty research grants. Teaching assistantships may become available for a given quarter. As financial aid within the department is limited, you may want to contact the Financial Aid Office regarding other assistance from the University Work-Study Program, loans, scholarships, etc.

Admission Requirements

- The M.S. and M.A. degree programs in the Department of Biological Sciences is open to graduates of accredited institutions who have a four-year baccalaureate degree in any field of the biological sciences and who have achieved a GPA of at least 2.75 in all undergraduate work and an average of 3.00 in all biological science courses taken as an upper division student. Normally, all applicants should have completed undergraduate courses equivalent to those required of all biological science majors at Cal State East Bay. Applicants must have taken basic courses in biological and physical sciences and mathematics/statistics; areas omitted, if any, will be treated as course deficiencies and must be completed by the time of classification (see below).
- In addition to filing the university application and fee, students must apply to the Department of Biological Sciences for admission to graduate standing in the M.S. or M.A. degree program. Application forms are available through the department office or by accessing the Biology Department website. In addition to the GPA requirements for admission mentioned in #1, the department requires that the following be sent directly to the Department of Biological Sciences:
 - departmental application
 - GRE General Test Scores (target scores are in the upper 30th percentile; significant deviation from target scores may be grounds for denial of admission)
 - three letters of reference
 - statement of purpose

Applicant files will not be reviewed or processed until the application file is complete; this is the applicant's responsibility. During the admission process, students interested in the M.S. program are encouraged to obtain information about research interests of the faculty and to contact faculty members who could potentially serve as thesis advisors.

- All students admitted to the program will be admitted as "Conditionally Classified Graduate" students.
- Those students applying for admission to the program with the intent of obtaining an M.S. degree in Marine Sciences from work done at Moss Landing Marine Laboratories must gain admission into "Conditionally Classified Graduate" status as stated above. However, the classification procedures as stated below WILL NOT apply for these students; instead, once admitted to the program as "Conditionally Classified Graduate" students, they will follow MLML's classification procedures (see the Marine Science chapter in the graduate section of this catalog).
- Any student not admitted to the program because of incomplete application, deficiency, or failure to meet deadlines is urged to enroll in the university as an "Unclassified Post-baccalaureate" student pending completion and/or reconsideration of the application for classification.
- No more than 13 quarter units of courses applicable toward the master's degree completed before admission to the program may be counted toward the degree.

Note: Although not an admission requirement, satisfaction of the University Writing Skills Requirement (UWSR) must begin during the first quarter of admission to the program and must be completed before a student can become a fully "Classified Graduate" student.

M.S. Requirements

A "Conditionally Classified Graduate" student must become a fully "Classified Graduate" student in the program as set forth in 1, 2, 3, and 4 below, if applicable, within four quarters of acceptance into the Master's program or the "Conditional Classification" will expire and the student will be placed in "Unclassified Post-baccalaureate" status. It is the responsibility of the student to make sure these requirements are met within the specified time limits.

- Establish a three-person graduate advisory committee. At least two faculty members from the Department of Biological Sciences will serve as members of the graduate advisory committee. One faculty member from the department will normally be the major advisor in guiding the student in graduate training. Other members of the committee will be chosen in consultation with the major advisor. The committee will advise on and approve the student's final program including any work and research units counted toward the degree. This advisory committee will also administer the oral examination at the completion of the thesis.
- Complete basic course deficiencies. If the student lacks basic courses in biological or physical sciences, or mathematics/statistics, these courses must be completed by the end of the fourth quarter following admission to the program. In addition, the student's advisory committee may also determine that there are other course deficiencies that need to be satisfied.
- Research proposal. The student must submit a formal research proposal to the departmental Graduate Committee. The department office or Graduate Coordinator has examples of these proposals and their format. The proposal must be approved by the student's advisory committee (item 1 above) and submitted to the Graduate Coordinator by the first day of the quarter in which the student wants to begin taking thesis units. If the work is to be done in an off-campus location, a letter of agreement must be included that indicates a mutual understanding and responsibility between the off-campus supervisor, Cal State East Bay, and the student.
- University Writing Skills Requirement. The University Writing Skills Requirement must be satisfied. (See Graduate Degree Information chapter in this catalog.)

Advanced to Candidacy

The student must have:

- attained "Classified Graduate" standing
- completed at least 12 quarter units of satisfactory work beyond the baccalaureate degree suitable for inclusion in an M.S. program in Biological Science as approved by the student's graduate advisory committee. At least 3 quarter units of graduate level coursework in residence at Cal State East Bay must be included. (You must maintain a 3.00 GPA in your degree coursework to remain in good standing.)
- received approval from his or her advisory committee for an individual research program.

M.S. Curricular Requirements (45 units)

A total of 45 quarter units is required beyond the baccalaureate with a GPA of 3.0 or above and no grade lower than "C" in courses included in the program, and with specific requirements as follows:

1. University Thesis (9 units)

Complete copies of the University Thesis must be submitted, in accordance with the rules set forth by the Thesis Editor in the Office of the Associate Vice President, Academic Programs and Graduate Studies, to the chair of the candidate's advisory committee by the sixth week of the quarter at the end of which the degree is desired.

- BIOL 6910 - University Thesis *Units: 1-9*

2. Graduate courses in Biology (14-36 units)

In area of specialization or in areas related to it as approved by the student's advisory committee; included must be at least one, but not more than two, graduate seminars in the area of special concentration. (May include a maximum of 4 units of Independent Study (BIOL 6900); in certain circumstances exceptions may be granted by the departmental Graduate Committee.)

3. Upper division undergraduate Biology Majors courses (0-22 units)

Taken as a graduate student and approved by the advisory committee as appropriate to the student's objective. No courses that are required for B.A. or B.S. Biological Sciences students, or those that are designated for non-majors, may be counted toward the M.S. degree.

4. An oral examination

An oral examination administered by the advisory committee covering the candidate's area of specialization and thesis research. This examination will be publicized and open to all faculty.

Granting the Degree

Upon successful completion of the above requirements, the department will recommend that the candidate be granted the M.S. degree.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Biostatistics, M.S.

Program Description

The Department of Statistics and Biostatistics offers graduate study leading to the degree Master of Science in Biostatistics. The program is designed to serve the needs of students with varying backgrounds in Statistics, Biological Sciences, Public Health, Computer Science, Mathematics and other sciences. The program includes curriculum designed to prepare students to work in the pharmaceutical and biotech industries. All students are expected to master a wide variety of applied statistical and probabilistic techniques and the theoretical foundations on which these techniques rest. They are expected to be familiar with recent developments and to be able to use the statistical literature to learn new techniques and theories throughout their professional careers. In addition to the general requirements stated elsewhere in this catalog, a student must satisfy the departmental requirements stated in the following paragraphs.

Student Learning Outcomes

Students graduating with an M.S. in Biostatistics from Cal State East Bay will be able to:

- Apply biostatistical methods to data, including (a) descriptive statistics, probability and graphical displays, (b) distributions, hypothesis testing and confidence intervals, and (c) uncertainty, likelihood, modeling and error analysis;
- Derive basic theory and communicate to others results involving biostatistical data analysis;
- Formulate problem solutions, produce appropriate computer code and to interpret results.

Admission Requirements

- A baccalaureate degree or equivalent.
- Differential and Integral Calculus, including multiple integration and infinite series.
- Departmental approval.
- For "Classified Graduate" status, fulfillment of the University Writing Skills Requirement.

In addition to the above minimal requirements for admission, if students have some of the following background they will be at an advantage both as to selection for the program and optimal progress toward the degree if admitted:

- basic statistics and probability at the level of STAT 3401, STAT 3502 (or beyond)

- additional mathematics at the level of MATH 2101 and MATH 3100 or MATH 3300 (or beyond)
- knowledge of a computer programming language
- coursework in biology and/or health sciences
- experience in a setting where studies or experiments are conducted for the collection of data

Advancement to Candidacy Requirements

- Completion of at least 15 quarter units of approved work beyond the baccalaureate, with an average of "B" (3.0) or higher.
- Departmental approval. (May be contingent upon a written or oral qualifying examination.)

Degree Requirements

Successful completion of the following unit, grade, and course requirements.

A. Unit and Grade Requirements

The M.S. in Biostatistics program consists of at least 48 quarter units of approved upper division and graduate work. At least 44 of these units must be approved graduate (6000 level) courses. All work applied toward the 48 quarter units must be at an average grade of "B" (3.0) or higher. No graduate-level course may be at a grade below "B-."

B. Course Requirements (48 units)

Additional courses referred to in section # 3 below must be approved in writing in advance by an advisor.

1. Required First Year Courses (24 units)

- STAT 6204 - Probability Theory *Units: 4*
- STAT 6205 - Statistical Theory *Units: 4*
- STAT 6250 - SAS Programming *Units: 4*
- STAT 6304 - Advanced Statistical Inference *Units: 4*
- STAT 6305 - Analysis of Variance Models *Units: 4*
- STAT 6509 - Theory and Application of Regression *Units: 4*

Students entering the program with acceptable credit for any of these courses (or equivalents) will select additional courses from approved graduate-level coursework, section # 3 below, or courses from other departments designated as acceptable by a graduate advisor. Students entering the program with acceptable credit for any of these courses (or equivalents) will select additional courses from approved graduate-level coursework, section # 3 below, or courses from other departments designated as acceptable by a graduate advisor.

2. Required Second Year Courses (20 units)

- BSTA 6651 - Analysis of Categorical Data in Biostatistics *Units: 4*
- BSTA 6652 - Survival Analysis in Biostatistics *Units: 4*
- BSTA 6653 - Clinical Trials in the Pharmaceutical and Biomedical Industries *Units: 4*
- STAT 6501 - Mathematical Statistics I *Units: 4*
- STAT 6502 - Mathematical Statistics II *Units: 4*

3. Additional Courses

Select one course from those listed below or, with department approval, select courses in Biostatistics, Biological Sciences, Computer Science, Mathematics, or Statistics. A partial list of courses is given below:

- BSTA 6690 - Statistical Bioinformatics *Units: 4*
- BSTA 6843 - Selected Topics in Biostatistics *Units: 4*

(may select from BSTA 6843-6849 Selected Topics in Biostatistics *Units: 4*)

- STAT 6260 - R Programming *Units: 4*
 - STAT 6310 - Advanced Stochastic Processes and Simulation *Units: 4*
 - STAT 6401 - Advanced Probability I *Units: 4*
 - STAT 6515 - Advanced Multivariate Analysis *Units: 4*
 - STAT 6550 - Bayesian Statistics *Units: 4*
 - STAT 6555 - Statistical Time Series Analysis *Units: 4*
 - STAT 6601 - Advanced Statistical Computing *Units: 4*
 - STAT 6610 - Data Visualization *Units: 4*
 - STAT 6620 - Statistical Learning with R *Units: 4*
 - STAT 6860 - Selected Topics in Graduate Probability and Statistics *Units: 4*
- (may select from STAT 6860-6864 Selected Topics in Graduate Probability and Statistics *Units: 4*)
- STAT 6898 - Cooperative Education *Units: 1-4*
 - STAT 6900 - Independent Study *Units: 1-4*
 - MATH 3100 - Linear Algebra *Units: 4* 1
 - MATH 3300 - Analysis I *Units: 4* 1

Notes

1. Students considering additional graduate education in Statistics or Biostatistics are strongly advised to take advanced mathematics coursework.

Comprehensive Examination

Successful completion of a departmental examination is required. This written examination will cover the contents of the courses in the candidate's approved program. Other material may be included, the general nature of which will be specified in advance. The examination will generally be given only in the Fall and Spring quarters, and will cover both applied and theoretical topics.

In each quarter of offering, the department Chair will appoint three or more members of the graduate faculty to administer the examination. Each student will generally take the comprehensive examination in the quarter s(he) intends to graduate or in the preceding quarter, after consulting with the graduate advisor. The examination committee is the final departmental authority in deciding eligibility to take the examination.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Business Administration, Entrepreneurship Option, M.B.A.

Business Administration, M.B.A.

Description of Programs

The mission of the College of Business and Economics is to prepare students to make ethical choices and succeed in a dynamic business environment shaped by the challenges of a competitive global economy, emerging technologies, and diverse stakeholders. All CBE programs are accredited by AACSB International - The Association to Advance Collegiate Schools of Business. The College of Business and Economics offers the following master's degrees:

- Master of Business Administration (M.B.A.); students may select one of the following options:
- Entrepreneurship
- Finance
- Global Innovators

- Human Resources and Organizational Behavior
- Information Technology Management
- Marketing Management
- Operations and Supply Chain Management
- Strategy and International Business
- Master of Science in Accountancy (M.S.A.)
- Master of Science in Business Administration (M.S.B.A.), Business Analytics
- Master of Arts (M.A.) in Economics

Please see the Economics chapter in this catalog for a description of the M.A. in Economics.

Student Learning Outcomes

Students graduating with a Master of Business Administration will be able to:

- Recognize and analyze legal and ethical issues in decision making.
- Identify global business opportunities, analyze global business challenges, and develop business strategies.
- Apply advanced written communication skills.
- Apply advanced oral communication skills.
- Demonstrate leadership and teamwork skills.
- Analyze and integrate knowledge across disciplines to make managerial decisions to reach solutions to complex business problems.
- Perform quantitative analyses and apply advanced technological tools to solve complex business problems.

Graduate Faculty Advisors for M.B.A. Options

- M.B.A./Entrepreneurship: Brian McKenzie
- M.B.A./Finance: Fung-Shine Pan
- M.B.A./Human Resources and Organizational Behavior: Asha Rao
- M.B.A./Information Technology Management: Hongwei Du
- M.B.A./Marketing Management: Lan Wu
- M.B.A./Operations and Supply Chain Management: Zinovy Radovitsky
- M.B.A. Strategy and International Business: Gregory Theyel, Yi Jiang
- M.B.A./Global Innovators: Yi Jiang, Glen Taylor

Admission

The M.B.A. is open to students who hold a baccalaureate degree from an accredited college or university. Each applicant is evaluated on the basis of

- past academic performance as reflected in undergraduate grade point average and subsequent coursework; and
- results of the Graduate Management Admissions Test (GMAT) in verbal, quantitative, and the "Index Score" that involves the total GMAT score, $\text{Index Score} = (\text{Upper Division GPA} \times 200) + \text{Total GMAT}$. Admission to the program is selective. The average GPA and GMAT score of applicants admitted to the program varies from year to year. For last year's admitted students profile, please visit the CBE Graduate Programs Office.
- GRE score, if provided. GMAT may be waived for applicants with five years or more work experience.

Proficiencies

All Conditionally Classified M.B.A. students must fulfill the University Writing Skills Requirement (UWSR) and M.B.A. program proficiencies. The Writing Skills Requirement could be met as an undergraduate or graduate student at one of the CSU system campuses, with a score of 4.5 or better on the GMAT essay, by passing the Writing Skills Test (WST) or through coursework. Information about the Writing Skills Test and the courses can be found on the Testing Office website. The Website contains information on test dates, registration procedures and fees. Further information can be obtained from the Testing Office, Library, Room LI 3165A, phone 510-885-3661. If students have not satisfied the UWSR before they begin their graduate work, they must either take the WST or enroll in a first tier course by the end of their first quarter in the program.

Students are also expected to have completed M.B.A. proficiency requirements in introductory mathematics and statistics with a grade of "C" or better and within 7 years of starting in the program. To satisfy the mathematics proficiency, students must complete the equivalent coursework in

intermediate algebra, MATH 1130 or an equivalent course. The statistics requirement may be met by a course in statistics that is equivalent to STAT 2010 or STAT 1000.

Requirements for Graduation

To be eligible for the M.B.A. a student must have been Advanced to Candidacy (see Graduate Degree Information chapter of the catalog) and have completed 52-64 quarter units meeting the following criteria:

- All have a course grade of "C" or better.
- Have a combined 3.0 grade point average (minimum) in all units taken to satisfy the requirements of the student's degree program.
- Have no more than 16 units for extension and/or transfer credit (any extension and/or transfer credit must be approved by the Program Director) and/or coursework taken in "Unclassified Postbaccalaureate" status.
- All units earned within the five years immediately preceding the completion of the requirements for the degree.
- Have completed a satisfactory program of study, defined below.

1. Fundamental Coursework (0-12 units)

Fundamental coursework must be completed before enrolling in any M.B.A. core course, except MKTG 6120 - Managerial Communication and MGMT 6120 - Globalization, Innovation and Sustainability. Fundamental coursework can be waived by passing an exam on a course by course basis. Exams are offered once per quarter. There is a fee of \$25 for each exam. Please see the M.B.A. website <http://www.mba.csueastbay.edu> or contact the CBE Graduate Programs Office (VBT 430, phone 510-885-2419) for dates and registration information.

- ACCT 6015 - Financial Accounting *Units: 4*
- ITM 6015 - Information Systems Development and Management *Units: 4*
- MGMT 6015 - Data Analysis and Decision Modeling for Managers *Units: 4*

2. Core Coursework (36 units)

MGMT 6120 and MKTG 6120 should be taken before other core courses. These two courses only require proficiencies as prerequisites. All remaining core courses require both proficiencies and fundamental coursework.

- ACCT 6215 - Managerial Accounting *Units: 4*
- ECON 6215 - Economics for Managers in a Global Economy *Units: 4*
- FIN 6215 - Corporate Financial Management *Units: 4*
- MGMT 6120 - Globalization, Innovation and Sustainability *Units: 4*
- MGMT 6215 - Business, Government and Society *Units: 4*
- MGMT 6220 - Operations and Supply Chain Management *Units: 4*
- MGMT 6225 - Executive Leadership *Units: 4*
- MKTG 6120 - Managerial Communication *Units: 4*
- MKTG 6215 - Marketing Management *Units: 4*

3. Capstone (4 units)

- ENTR 6800 - Entrepreneurship Practicum *Units: 4*
- or
- MGMT 6800 - Seminar in Strategic Management *Units: 4*

4. Electives or Option (12 units)

Students take any 3 courses at the 6100 level or beyond selected from ACCT, ECON, ENTR, FIN, ITM, MGMT, or MKTG. Courses cannot otherwise be used as part of their degree program.

or

Students select one of the individual MBA "Options" listed under Programs of Study.

Entrepreneurship Option

Required Courses (12 Units)

- ENTR 6480 - Introduction to Entrepreneurship *Units: 4*
- ENTR 6485 - New Venture Development *Units: 4*
- MGMT 6520 - Negotiation for Managers and Entrepreneurs *Units: 4*

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website or call 510.885.3661.

Transfer of Courses

Upper division prerequisite and foundation and graduate courses will only be considered for equivalency or transfer credit if they are from AACSB accredited institutions. Exceptions will be made for programs that have current and signed agreements with the College of Business and Economics.

Business Administration, Finance Option, M.B.A.

Business Administration, M.B.A.

Description of Programs

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- Entrepreneurship
- Finance
- Global Innovators
- Human Resources and Organizational Behavior
- Information Technology Management
- Marketing Management
- Operations and Supply Chain Management
- Strategy and International Business
- Master of Science in Accountancy (M.S.A.)
- Master of Science in Business Administration (M.S.B.A.), Business Analytics
- Master of Arts (M.A.) in Economics

Please see the Economics chapter in this catalog for a description of the M.A. in Economics.

Student Learning Outcomes

Students graduating with a Master of Business Administration will be able to:

- Recognize and analyze legal and ethical issues in decision making.
- Identify global business opportunities, analyze global business challenges, and develop business strategies.
- Apply advanced written communication skills.
- Apply advanced oral communication skills.
- Demonstrate leadership and teamwork skills.

- Analyze and integrate knowledge across disciplines to make managerial decisions to reach solutions to complex business problems.
- Perform quantitative analyses and apply advanced technological tools to solve complex business problems.

Graduate Faculty Advisors for M.B.A. Options

- M.B.A./Entrepreneurship: Brian McKenzie
- M.B.A./Finance: Fung-Shine Pan
- M.B.A./Human Resources and Organizational Behavior: Asha Rao
- M.B.A./Information Technology Management: Hongwei Du
- M.B.A./Marketing Management: Lan Wu
- M.B.A./Operations and Supply Chain Management: Zinovy Radovilsky
- M.B.A. Strategy and International Business: Gregory Theyel, Yi Jiang
- M.B.A./Global Innovators: Yi Jiang, Glen Taylor

Admission

The M.B.A. is open to students who hold a baccalaureate degree from an accredited college or university. Each applicant is evaluated on the basis of

- past academic performance as reflected in undergraduate grade point average and subsequent coursework; and
- results of the Graduate Management Admissions Test (GMAT) in verbal, quantitative, and the "Index Score" that involves the total GMAT score, $\text{Index Score} = (\text{Upper Division GPA} \times 200) + \text{Total GMAT}$. Admission to the program is selective. The average GPA and GMAT score of applicants admitted to the program varies from year to year. For last year's admitted students profile, please visit the CBE Graduate Programs Office.
- GRE score, if provided. GMAT may be waived for applicants with five years or more work experience.

Proficiencies

All Conditionally Classified M.B.A. students must fulfill the University Writing Skills Requirement (UWSR) and M.B.A. program proficiencies. The Writing Skills Requirement could be met as an undergraduate or graduate student at one of the CSU system campuses, with a score of 4.5 or better on the GMAT essay, by passing the Writing Skills Test (WST) or through coursework. Information about the Writing Skills Test and the courses can be found on the Testing Office website. The Website contains information on test dates, registration procedures and fees. Further information can be obtained from the Testing Office, Library, Room LI 3165A, phone 510-885-3661. If students have not satisfied the UWSR before they begin their graduate work, they must either take the WST or enroll in a first tier course by the end of their first quarter in the program.

Students are also expected to have completed M.B.A. proficiency requirements in introductory mathematics and statistics with a grade of "C" or better and within 7 years of starting in the program. To satisfy the mathematics proficiency, students must complete the equivalent coursework in intermediate algebra, MATH 1130 or an equivalent course. The statistics requirement may be met by a course in statistics that is equivalent to STAT 2010 or STAT 1000.

Requirements for Graduation

To be eligible for the M.B.A. a student must have been Advanced to Candidacy (see Graduate Degree Information chapter of the catalog) and have completed 52-64 quarter units meeting the following criteria:

- All have a course grade of "C" or better.
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- All units earned within the five years immediately preceding the completion of the requirements for the degree.
- Have completed a satisfactory program of study, defined below.

1. Fundamental Coursework (0-12 units)

Fundamental coursework must be completed before enrolling in any M.B.A. core course, except MKTG 6120 - Managerial Communication and MGMT 6120 - Globalization, Innovation and Sustainability. Fundamental coursework can be waived by passing an exam on a course by course

basis. Exams are offered once per quarter. There is a fee of \$25 for each exam. Please see the M.B.A. website <http://www.mba.csueastbay.edu> or contact the CBE Graduate Programs Office (VBT 430, phone 510-885-2419) for dates and registration information.

- ACCT 6015 - Financial Accounting *Units: 4*
- ITM 6015 - Information Systems Development and Management *Units: 4*
- MGMT 6015 - Data Analysis and Decision Modeling for Managers *Units: 4*

2. Core Coursework (36 units)

MGMT 6120 and MKTG 6120 should be taken before other core courses. These two courses only require proficiencies as prerequisites. All remaining core courses require both proficiencies and fundamental coursework.

- ACCT 6215 - Managerial Accounting *Units: 4*
- ECON 6215 - Economics for Managers in a Global Economy *Units: 4*
- FIN 6215 - Corporate Financial Management *Units: 4*
- MGMT 6120 - Globalization, Innovation and Sustainability *Units: 4*
- MGMT 6215 - Business, Government and Society *Units: 4*
- MGMT 6220 - Operations and Supply Chain Management *Units: 4*
- MGMT 6225 - Executive Leadership *Units: 4*
- MKTG 6120 - Managerial Communication *Units: 4*
- MKTG 6215 - Marketing Management *Units: 4*

3. Capstone (4 units)

- ENTR 6800 - Entrepreneurship Practicum *Units: 4*
- or
- MGMT 6800 - Seminar in Strategic Management *Units: 4*

4. Electives or Option (12 units)

Students take any 3 courses at the 6100 level or beyond selected from ACCT, ECON, ENTR, FIN, ITM, MGMT, or MKTG. Courses cannot otherwise be used as part of their degree program.

or

Students select one of the individual MBA "Options" listed under Programs of Study.

Finance Option (12 Units)

Select Three courses from the following:

- FIN 6305 - New Venture Financing *Units: 4*
- FIN 6310 - Seminar in Security Analysis and Portfolio Management *Units: 4*
- FIN 6315 - Seminar in Options and Futures *Units: 4*
- FIN 6320 - Studies in Financial Markets *Units: 4*
- FIN 6325 - Financial Management of Banking Institutions *Units: 4*
- FIN 6375 - International Financial Management *Units: 4*

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website or call 510.885.3661.

Transfer of Courses

Upper division prerequisite and foundation and graduate courses will only be considered for equivalency or transfer credit if they are from AACSB accredited institutions. Exceptions will be made for programs that have current and signed agreements with the College of Business and Economics.

Business Administration, Global Innovators Option, M.B.A.

Business Administration, M.B.A.

Description of Programs

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- Finance
- Global Innovators
- Human Resources and Organizational Behavior
- Information Technology Management
- Marketing Management
- Operations and Supply Chain Management
- Strategy and International Business
- Master of Science in Accountancy (M.S.A.)
- Master of Science in Business Administration (M.S.B.A.), Business Analytics
- Master of Arts (M.A.) in Economics

Please see the Economics chapter in this catalog for a description of the M.A. in Economics.

Student Learning Outcomes

Students graduating with a Master of Business Administration will be able to:

- Recognize and analyze legal and ethical issues in decision making.
- Identify global business opportunities, analyze global business challenges, and develop business strategies.
- Apply advanced written communication skills.
- Apply advanced oral communication skills.
- Demonstrate leadership and teamwork skills.
- Analyze and integrate knowledge across disciplines to make managerial decisions to reach solutions to complex business problems.
- Perform quantitative analyses and apply advanced technological tools to solve complex business problems.

Graduate Faculty Advisors for M.B.A. Options

- M.B.A./Entrepreneurship: Brian McKenzie
- M.B.A./Finance: Fung-Shine Pan
- M.B.A./Human Resources and Organizational Behavior: Asha Rao
- M.B.A./Information Technology Management: Hongwei Du
- M.B.A./Marketing Management: Lan Wu
- M.B.A./Operations and Supply Chain Management: Zinovy Radovitsky
- M.B.A. Strategy and International Business: Gregory Theyel, Yi Jiang
- M.B.A./Global Innovators: Yi Jiang, Glen Taylor

Admission

The M.B.A. is open to students who hold a baccalaureate degree from an accredited college or university. Each applicant is evaluated on the basis of

- past academic performance as reflected in undergraduate grade point average and subsequent coursework; and
- results of the Graduate Management Admissions Test (GMAT) in verbal, quantitative, and the "Index Score" that involves the total GMAT score, $\text{Index Score} = (\text{Upper Division GPA} \times 200) + \text{Total GMAT}$. Admission to the program is selective. The average GPA and GMAT score of applicants admitted to the program varies from year to year. For last year's admitted students profile, please visit the CBE Graduate Programs Office.
- GRE score, if provided. GMAT may be waived for applicants with five years or more work experience.

Proficiencies

All Conditionally Classified M.B.A. students must fulfill the University Writing Skills Requirement (UWSR) and M.B.A. program proficiencies. The Writing Skills Requirement could be met as an undergraduate or graduate student at one of the CSU system campuses, with a score of 4.5 or better on the GMAT essay, by passing the Writing Skills Test (WST) or through coursework. Information about the Writing Skills Test and the courses can be found on the Testing Office website. The Website contains information on test dates, registration procedures and fees. Further information can be obtained from the Testing Office, Library, Room LI 3165A, phone 510-885-3661. If students have not satisfied the UWSR before they begin their graduate work, they must either take the WST or enroll in a first tier course by the end of their first quarter in the program.

Students are also expected to have completed M.B.A. proficiency requirements in introductory mathematics and statistics with a grade of "C" or better and within 7 years of starting in the program. To satisfy the mathematics proficiency, students must complete the equivalent coursework in intermediate algebra, MATH 1130 or an equivalent course. The statistics requirement may be met by a course in statistics that is equivalent to STAT 2010 or STAT 1000.

Requirements for Graduation

To be eligible for the M.B.A. a student must have been Advanced to Candidacy (see Graduate Degree Information chapter of the catalog) and have completed 52-64 quarter units meeting the following criteria:

- All have a course grade of "C" or better.
- Have a combined 3.0 grade point average (minimum) in all units taken to satisfy the requirements of the student's degree program.
- Have no more than 16 units for extension and/or transfer credit (any extension and/or transfer credit must be approved by the Program Director) and/or coursework taken in "Unclassified Postbaccalaureate" status.
- All units earned within the five years immediately preceding the completion of the requirements for the degree.
- Have completed a satisfactory program of study, defined below.

1. Fundamental Coursework (0-12 units)

Fundamental coursework must be completed before enrolling in any M.B.A. core course, except MKTG 6120 - Managerial Communication and MGMT 6120 - Globalization, Innovation and Sustainability. Fundamental coursework can be waived by passing an exam on a course by course basis. Exams are offered once per quarter. There is a fee of \$25 for each exam. Please see the M.B.A. website <http://www.mba.csueastbay.edu> or contact the CBE Graduate Programs Office (VBT 430, phone 510-885-2419) for dates and registration information.

- ACCT 6015 - Financial Accounting *Units: 4*
- ITM 6015 - Information Systems Development and Management *Units: 4*
- MGMT 6015 - Data Analysis and Decision Modeling for Managers *Units: 4*

2. Core Coursework (36 units)

MGMT 6120 and MKTG 6120 should be taken before other core courses. These two courses only require proficiencies as prerequisites. All remaining core courses require both proficiencies and fundamental coursework.

- ACCT 6215 - Managerial Accounting *Units: 4*
- ECON 6215 - Economics for Managers in a Global Economy *Units: 4*
- FIN 6215 - Corporate Financial Management *Units: 4*

- MGMT 6120 - Globalization, Innovation and Sustainability *Units: 4*
- MGMT 6215 - Business, Government and Society *Units: 4*
- MGMT 6220 - Operations and Supply Chain Management *Units: 4*
- MGMT 6225 - Executive Leadership *Units: 4*
- MKTG 6120 - Managerial Communication *Units: 4*
- MKTG 6215 - Marketing Management *Units: 4*

3. Capstone (4 units)

- ENTR 6800 - Entrepreneurship Practicum *Units: 4*
- or*
- MGMT 6800 - Seminar in Strategic Management *Units: 4*

4. Electives or Option (12 units)

Students take any 3 courses at the 6100 level or beyond selected from ACCT, ECON, ENTR, FIN, ITM, MGMT, or MKTG. Courses cannot otherwise be used as part of their degree program.

or

Students select one of the individual MBA "Options" listed under Programs of Study.

Global Innovators Option (12 units) - Cohort Based Program Only

Three courses will be selected from the following:

- ENTR 6485 - New Venture Development *Units: 4*
- FIN 6305 - New Venture Financing *Units: 4*
- MGMT 6440 - Global Strategy *Units: 4*
- MGMT 6150 - Global Supply Chain Management *Units: 4*
- MGMT 6460 - Strategic Management for a Sustainable Society *Units: 4*
- MGMT 6470 - Management of Technology and Innovation *Units: 4*
- MGMT 6560 - High Performance Management *Units: 4*
- MKTG 6401 - Marketing Research *Units: 4*

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website or call 510.885.3661.

Transfer of Courses

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Business Administration, Human Resources and Organizational Behavior Option, M.B.A.

Business Administration, M.B.A.

Description of Programs

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- Strategy and International Business
- Master of Science in Accountancy (M.S.A.)
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Graduate Faculty Advisors for M.B.A. Options

- M.B.A./Entrepreneurship: Brian McKenzie
- M.B.A./Finance: Fung-Shine Pan
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1. Fundamental Coursework (0-12 units)

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- ACCT 6015 - Financial Accounting *Units: 4*
- ITM 6015 - Information Systems Development and Management *Units: 4*
- MGMT 6015 - Data Analysis and Decision Modeling for Managers *Units: 4*

2. Core Coursework (36 units)

MGMT 6120 and MKTG 6120 should be taken before other core courses. These two courses only require proficiencies as prerequisites. All remaining core courses require both proficiencies and fundamental coursework.

- ACCT 6215 - Managerial Accounting *Units: 4*
- ECON 6215 - Economics for Managers in a Global Economy *Units: 4*
- FIN 6215 - Corporate Financial Management *Units: 4*
- MGMT 6120 - Globalization, Innovation and Sustainability *Units: 4*
- MGMT 6215 - Business, Government and Society *Units: 4*
- MGMT 6220 - Operations and Supply Chain Management *Units: 4*
- MGMT 6225 - Executive Leadership *Units: 4*
- MKTG 6120 - Managerial Communication *Units: 4*
- MKTG 6215 - Marketing Management *Units: 4*

3. Capstone (4 units)

- ENTR 6800 - Entrepreneurship Practicum *Units: 4*

or

- MGMT 6800 - Seminar in Strategic Management *Units: 4*

4. Electives or Option (12 units)

Students take any 3 courses at the 6100 level or beyond selected from ACCT, ECON, ENTR, FIN, ITM, MGMT, or MKTG. Courses cannot otherwise be used as part of their degree program.

or

Students select one of the individual MBA "Options" listed under Programs of Study.

Human Resources and Organizational Behavior Option (12 units)

a. Required Courses (4 units)

- MGMT 6612 - Strategic Human Resources: Frameworks for General Managers *Units: 4*

b. Electives (8 units)

Select two courses from the following (we highly recommend that 3 courses be taken):

- MGMT 6520 - Negotiation for Managers and Entrepreneurs *Units: 4*
- MGMT 6560 - High Performance Management *Units: 4*
- MGMT 6613 - Topics in Human Resource Management *Units: 4*
- MGMT 6615 - Strategic Compensation, Incentives, and Productivity *Units: 4*
- MGMT 6618 - Selecting, Maintaining and Retaining Employees *Units: 4*
- MGMT 6675 - International Human Resource Management *Units: 4*

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website or call 510.885.3661.

Transfer of Courses

Upper division prerequisite and foundation and graduate courses will only be considered for equivalency or transfer credit if they are from AACSB accredited institutions. Exceptions will be made for programs that have current and signed agreements with the College of Business and Economics.

Business Administration, Information Technology Management Option, M.B.A.

Business Administration, M.B.A.

Description of Programs

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- Master of Business Administration (M.B.A.); students may select one of the following options:

- Entrepreneurship
 - Finance
 - Global Innovators
 - Human Resources and Organizational Behavior
 - Information Technology Management
 - Marketing Management
 - Operations and Supply Chain Management
 - Strategy and International Business
 - Master of Science in Accountancy (M.S.A.)
 - Master of Science in Business Administration (M.S.B.A.), Business Analytics
 - Master of Arts (M.A.) in Economics
- Please see the Economics chapter in this catalog for a description of the M.A. in Economics.

Student Learning Outcomes

Students graduating with a Master of Business Administration will be able to:

- Recognize and analyze legal and ethical issues in decision making.
- Identify global business opportunities, analyze global business challenges, and develop business strategies.
- Apply advanced written communication skills.
- Apply advanced oral communication skills.
- Demonstrate leadership and teamwork skills.
- Analyze and integrate knowledge across disciplines to make managerial decisions to reach solutions to complex business problems.
- Perform quantitative analyses and apply advanced technological tools to solve complex business problems.

Graduate Faculty Advisors for M.B.A. Options

- M.B.A./Entrepreneurship: Brian McKenzie
- M.B.A./Finance: Fung-Shine Pan
- M.B.A./Human Resources and Organizational Behavior: Asha Rao
- M.B.A./Information Technology Management: Hongwei Du
- M.B.A./Marketing Management: Lan Wu
- M.B.A./Operations and Supply Chain Management: Zinovy Radovitsky
- M.B.A. Strategy and International Business: Gregory Theyel, Yi Jiang
- M.B.A./Global Innovators: Yi Jiang, Glen Taylor

Admission

The M.B.A. is open to students who hold a baccalaureate degree from an accredited college or university. Each applicant is evaluated on the basis of

- past academic performance as reflected in undergraduate grade point average and subsequent coursework; and
- results of the Graduate Management Admissions Test (GMAT) in verbal, quantitative, and the "Index Score" that involves the total GMAT score, $\text{Index Score} = (\text{Upper Division GPA} \times 200) + \text{Total GMAT}$. Admission to the program is selective. The average GPA and GMAT score of applicants admitted to the program varies from year to year. For last year's admitted students profile, please visit the CBE Graduate Programs Office.
- GRE score, if provided. GMAT may be waived for applicants with five years or more work experience.

Proficiencies

All Conditionally Classified M.B.A. students must fulfill the University Writing Skills Requirement (UWSR) and M.B.A. program proficiencies. The Writing Skills Requirement could be met as an undergraduate or graduate student at one of the CSU system campuses, with a score of 4.5 or better on the GMAT essay, by passing the Writing Skills Test (WST) or through coursework. Information about the Writing Skills Test and the courses can be found on the Testing Office website. The Website contains information on test dates, registration procedures and fees. Further

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Students are also expected to have completed M.B.A. proficiency requirements in introductory mathematics and statistics with a grade of "C" or better and within 7 years of starting in the program. To satisfy the mathematics proficiency, students must complete the equivalent coursework in intermediate algebra, MATH 1130 or an equivalent course. The statistics requirement may be met by a course in statistics that is equivalent to STAT 2010 or STAT 1000.

Requirements for Graduation

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- All have a course grade of "C" or better.
- Have a combined 3.0 grade point average (minimum) in all units taken to satisfy the requirements of the student's degree program.
- Have no more than 16 units for extension and/or transfer credit (any extension and/or transfer credit must be approved by the Program Director) and/or coursework taken in "Unclassified Postbaccalaureate" status.
- All units earned within the five years immediately preceding the completion of the requirements for the degree.
- Have completed a satisfactory program of study, defined below.

1. Fundamental Coursework (0-12 units)

Fundamental coursework must be completed before enrolling in any M.B.A. core course, except MKTG 6120 - Managerial Communication and MGMT 6120 - Globalization, Innovation and Sustainability. Fundamental coursework can be waived by passing an exam on a course by course basis. Exams are offered once per quarter. There is a fee of \$25 for each exam. Please see the M.B.A. website <http://www.mba.csueastbay.edu> or contact the CBE Graduate Programs Office (VBT 430, phone 510-885-2419) for dates and registration information.

- ACCT 6015 - Financial Accounting *Units: 4*
- ITM 6015 - Information Systems Development and Management *Units: 4*
- MGMT 6015 - Data Analysis and Decision Modeling for Managers *Units: 4*

2. Core Coursework (36 units)

MGMT 6120 and MKTG 6120 should be taken before other core courses. These two courses only require proficiencies as prerequisites. All remaining core courses require both proficiencies and fundamental coursework.

- ACCT 6215 - Managerial Accounting *Units: 4*
- ECON 6215 - Economics for Managers in a Global Economy *Units: 4*
- FIN 6215 - Corporate Financial Management *Units: 4*
- MGMT 6120 - Globalization, Innovation and Sustainability *Units: 4*
- MGMT 6215 - Business, Government and Society *Units: 4*
- MGMT 6220 - Operations and Supply Chain Management *Units: 4*
- MGMT 6225 - Executive Leadership *Units: 4*
- MKTG 6120 - Managerial Communication *Units: 4*
- MKTG 6215 - Marketing Management *Units: 4*

3. Capstone (4 units)

- ENTR 6800 - Entrepreneurship Practicum *Units: 4*
- or
- MGMT 6800 - Seminar in Strategic Management *Units: 4*

4. Electives or Option (12 units)

Students take any 3 courses at the 6100 level or beyond selected from ACCT, ECON, ENTR, FIN, ITM, MGMT, or MKTG. Courses cannot otherwise be used as part of their degree program.

or

Students select one of the individual MBA "Options" listed under Programs of Study.

Information Technology Management Option (12 units)

a. Required Courses (8 units)

- ITM 6271 - Database Management and Applications *Units: 4*
- ITM 6273 - Knowledge Management *Units: 4*

b. Electives within Information Technology Management (4 units)

Select one course from the following:

- ITM 6130 - Enterprise Management Systems *Units: 4*
- MGMT 6155 - Applied Project Management *Units: 4*

Other Degree Requirements

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Business Administration, M.B.A.

Business Administration, M.B.A.

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 - Human Resources and Organizational Behavior
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 - Marketing Management
 - Operations and Supply Chain Management
 - Strategy and International Business
- Master of Science in Accountancy (M.S.A.)
- Master of Science in Business Administration (M.S.B.A.), Business Analytics
- Master of Arts (M.A.) in Economics

Please see the Economics chapter in this catalog for a description of the M.A. in Economics.

Student Learning Outcomes

Students graduating with a Master of Business Administration will be able to:

- Recognize and analyze legal and ethical issues in decision making.
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- Apply advanced oral communication skills.
- Demonstrate leadership and teamwork skills.
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Graduate Faculty Advisors for M.B.A. Options

- M.B.A./Entrepreneurship: Brian McKenzie
- M.B.A./Finance: Fung-Shine Pan
- M.B.A./Human Resources and Organizational Behavior: Asha Rao
- M.B.A./Information Technology Management: Hongwei Du
- M.B.A./Marketing Management: Lan Wu
- M.B.A./Operations and Supply Chain Management: Zinovy Radovilsky
- M.B.A. Strategy and International Business: Gregory Theyel, Yi Jiang
- M.B.A./Global Innovators: Yi Jiang, Glen Taylor

Admission

The M.B.A. is open to students who hold a baccalaureate degree from an accredited college or university. Each applicant is evaluated on the basis of

- past academic performance as reflected in undergraduate grade point average and subsequent coursework; and
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- GRE score, if provided. GMAT may be waived for applicants with five years or more work experience.

Proficiencies

All Conditionally Classified M.B.A. students must fulfill the University Writing Skills Requirement (UWSR) and M.B.A. program proficiencies. The Writing Skills Requirement could be met as an undergraduate or graduate student at one of the CSU system campuses, with a score of 4.5 or better on the GMAT essay, by passing the Writing Skills Test (WST) or through coursework. Information about the Writing Skills Test and the courses can be found on the Testing Office website. The Website contains information on test dates, registration procedures and fees. Further information can be obtained from the Testing Office, Library, Room LI 3165A, phone 510-885-3661. If students have not satisfied the UWSR before they begin their graduate work, they must either take the WST or enroll in a first tier course by the end of their first quarter in the program.

Students are also expected to have completed M.B.A. proficiency requirements in introductory mathematics and statistics with a grade of "C" or better and within 7 years of starting in the program. To satisfy the mathematics proficiency, students must complete the equivalent coursework in intermediate algebra, MATH 1130 or an equivalent course. The statistics requirement may be met by a course in statistics that is equivalent to STAT 2010 or STAT 1000.

Requirements for Graduation

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- ACCT 6015 - Financial Accounting *Units: 4*
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- MGMT 6015 - Data Analysis and Decision Modeling for Managers *Units: 4*

2. Core Coursework (36 units)

MGMT 6120 and MKTG 6120 should be taken before other core courses. These two courses only require proficiencies as prerequisites. All remaining core courses require both proficiencies and fundamental coursework.

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- MGMT 6220 - Operations and Supply Chain Management *Units: 4*
- MGMT 6225 - Executive Leadership *Units: 4*
- MKTG 6120 - Managerial Communication *Units: 4*
- MKTG 6215 - Marketing Management *Units: 4*

3. Capstone (4 units)

- ENTR 6800 - Entrepreneurship Practicum *Units: 4*
- or*
- MGMT 6800 - Seminar in Strategic Management *Units: 4*

4. Electives or Option (12 units)

Students take any 3 courses at the 6100 level or beyond selected from ACCT, ECON, ENTR, FIN, ITM, MGMT, or MKTG. Courses cannot otherwise be used as part of their degree program.

or

Students select one of the individual MBA "Options" listed under Programs of Study.

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Business Administration, Marketing Management Option, M.B.A.

Business Administration, M.B.A.

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Graduate Faculty Advisors for M.B.A. Options

- M.B.A./Entrepreneurship: Brian McKenzie
- M.B.A./Finance: Fung-Shine Pan
- M.B.A./Human Resources and Organizational Behavior: Asha Rao
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- ITM 6015 - Information Systems Development and Management *Units: 4*
- MGMT 6015 - Data Analysis and Decision Modeling for Managers *Units: 4*

2. Core Coursework (36 units)

MGMT 6120 and MKTG 6120 should be taken before other core courses. These two courses only require proficiencies as prerequisites. All remaining core courses require both proficiencies and fundamental coursework.

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- MGMT 6225 - Executive Leadership *Units: 4*
- MKTG 6120 - Managerial Communication *Units: 4*
- MKTG 6215 - Marketing Management *Units: 4*

3. Capstone (4 units)

- ENTR 6800 - Entrepreneurship Practicum *Units: 4*
- or*
- MGMT 6800 - Seminar in Strategic Management *Units: 4*

4. Electives or Option (12 units)

Students take any 3 courses at the 6100 level or beyond selected from ACCT, ECON, ENTR, FIN, ITM, MGMT, or MKTG. Courses cannot otherwise be used as part of their degree program.

or

Students select one of the individual MBA "Options" listed under Programs of Study.

Marketing Management Option (12 units)

Select three courses from the following:

- MKTG 6401 - Marketing Research *Units: 4*
- MKTG 6410 - Buyer Behavior *Units: 4*
- MKTG 6411 - Product Management *Units: 4*
- MKTG 6413 - Integrated Marketing Communications *Units: 4*
- MKTG 6414 - Distribution Management *Units: 4*
- MKTG 6450 - Seminar in Selected Marketing Topics *Units: 4*
- MKTG 6470 - International Marketing *Units: 4*
- MKTG 6999 - Issues in Marketing *Units: 4*

Other Degree Requirements

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Business Administration, Operations and Supply Chain Management Option, M.B.A.

Business Administration, M.B.A.

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2. Core Coursework (36 units)

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- MKTG 6120 - Managerial Communication *Units: 4*
- MKTG 6215 - Marketing Management *Units: 4*

3. Capstone (4 units)

- ENTR 6800 - Entrepreneurship Practicum *Units: 4*

or

- MGMT 6800 - Seminar in Strategic Management *Units: 4*

4. Electives or Option (12 units)

Students take any 3 courses at the 6100 level or beyond selected from ACCT, ECON, ENTR, FIN, ITM, MGMT, or MKTG. Courses cannot otherwise be used as part of their degree program.

or

Students select one of the individual MBA "Options" listed under Programs of Study.

Operations and Supply Chain Management Option (12 units)

Select three courses from the following:

- MGMT 6115 - E-Commerce Enterprise Management *Units: 4*
- MGMT 6125 - Purchasing Management and Strategic Sourcing *Units: 4*
- MGMT 6130 - Enterprise Planning and Control *Units: 4*
- MGMT 6141 - Service Operations Management *Units: 4*
- MGMT 6145 - Logistics Management *Units: 4*
- MGMT 6150 - Global Supply Chain Management *Units: 4*
- MGMT 6155 - Applied Project Management *Units: 4*

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website or call 510.885.3661.

Transfer of Courses

Upper division prerequisite and foundation and graduate courses will only be considered for equivalency or transfer credit if they are from AACSB accredited institutions. Exceptions will be made for programs that have current and signed agreements with the College of Business and Economics.

Business Administration, Strategy and International Business Option, M.B.A.

Business Administration, M.B.A.

Description of Programs

The mission of the College of Business and Economics is to prepare students to make ethical choices and succeed in a dynamic business environment shaped by the challenges of a competitive global economy, emerging technologies, and diverse stakeholders. All CBE programs are accredited by AACSB International - The Association to Advance Collegiate Schools of Business. The College of Business and Economics offers the following master's degrees:

- Master of Business Administration (M.B.A.); students may select one of the following options:
- Entrepreneurship
- Finance
- Global Innovators
- Human Resources and Organizational Behavior
- Information Technology Management
- Marketing Management
- Operations and Supply Chain Management

- Strategy and International Business
- Master of Science in Accountancy (M.S.A.)
- Master of Science in Business Administration (M.S.B.A.), Business Analytics
- Master of Arts (M.A.) in Economics

Please see the Economics chapter in this catalog for a description of the M.A. in Economics.

Student Learning Outcomes

Students graduating with a Master of Business Administration will be able to:

- Recognize and analyze legal and ethical issues in decision making.
- Identify global business opportunities, analyze global business challenges, and develop business strategies.
- Apply advanced written communication skills.
- Apply advanced oral communication skills.
- Demonstrate leadership and teamwork skills.
- Analyze and integrate knowledge across disciplines to make managerial decisions to reach solutions to complex business problems.
- Perform quantitative analyses and apply advanced technological tools to solve complex business problems.

Graduate Faculty Advisors for M.B.A. Options

- M.B.A./Entrepreneurship: Brian McKenzie
- M.B.A./Finance: Fung-Shine Pan
- M.B.A./Human Resources and Organizational Behavior: Asha Rao
- M.B.A./Information Technology Management: Hongwei Du
- M.B.A./Marketing Management: Lan Wu
- M.B.A./Operations and Supply Chain Management: Zinovy Radovilsky
- M.B.A. Strategy and International Business: Gregory Theyel, Yi Jiang
- M.B.A./Global Innovators: Yi Jiang, Glen Taylor

Admission

The M.B.A. is open to students who hold a baccalaureate degree from an accredited college or university. Each applicant is evaluated on the basis of

- past academic performance as reflected in undergraduate grade point average and subsequent coursework; and
- results of the Graduate Management Admissions Test (GMAT) in verbal, quantitative, and the "Index Score" that involves the total GMAT score, $\text{Index Score} = (\text{Upper Division GPA} \times 200) + \text{Total GMAT}$. Admission to the program is selective. The average GPA and GMAT score of applicants admitted to the program varies from year to year. For last year's admitted students profile, please visit the CBE Graduate Programs Office.
- GRE score, if provided. GMAT may be waived for applicants with five years or more work experience.

Proficiencies

All Conditionally Classified M.B.A. students must fulfill the University Writing Skills Requirement (UWSR) and M.B.A. program proficiencies. The Writing Skills Requirement could be met as an undergraduate or graduate student at one of the CSU system campuses, with a score of 4.5 or better on the GMAT essay, by passing the Writing Skills Test (WST) or through coursework. Information about the Writing Skills Test and the courses can be found on the Testing Office website. The Website contains information on test dates, registration procedures and fees. Further information can be obtained from the Testing Office, Library, Room LI 3165A, phone 510-885-3661. If students have not satisfied the UWSR before they begin their graduate work, they must either take the WST or enroll in a first tier course by the end of their first quarter in the program.

Students are also expected to have completed M.B.A. proficiency requirements in introductory mathematics and statistics with a grade of "C" or better and within 7 years of starting in the program. To satisfy the mathematics proficiency, students must complete the equivalent coursework in intermediate algebra, MATH 1130 or an equivalent course. The statistics requirement may be met by a course in statistics that is equivalent to STAT 2010 or STAT 1000.

Requirements for Graduation

To be eligible for the M.B.A. a student must have been Advanced to Candidacy (see Graduate Degree Information chapter of the catalog) and have completed 52-64 quarter units meeting the following criteria:

- All have a course grade of "C" or better.
- Have a combined 3.0 grade point average (minimum) in all units taken to satisfy the requirements of the student's degree program.
- Have no more than 16 units for extension and/or transfer credit (any extension and/or transfer credit must be approved by the Program Director) and/or coursework taken in "Unclassified Postbaccalaureate" status.
- All units earned within the five years immediately preceding the completion of the requirements for the degree.
- Have completed a satisfactory program of study, defined below.

1. Fundamental Coursework (0-12 units)

Fundamental coursework must be completed before enrolling in any M.B.A. core course, except MKTG 6120 - Managerial Communication and MGMT 6120 - Globalization, Innovation and Sustainability. Fundamental coursework can be waived by passing an exam on a course by course basis. Exams are offered once per quarter. There is a fee of \$25 for each exam. Please see the M.B.A. website <http://www.mba.csueastbay.edu> or contact the CBE Graduate Programs Office (VBT 430, phone 510-885-2419) for dates and registration information.

- ACCT 6015 - Financial Accounting *Units: 4*
- ITM 6015 - Information Systems Development and Management *Units: 4*
- MGMT 6015 - Data Analysis and Decision Modeling for Managers *Units: 4*

2. Core Coursework (36 units)

MGMT 6120 and MKTG 6120 should be taken before other core courses. These two courses only require proficiencies as prerequisites. All remaining core courses require both proficiencies and fundamental coursework.

- ACCT 6215 - Managerial Accounting *Units: 4*
- ECON 6215 - Economics for Managers in a Global Economy *Units: 4*
- FIN 6215 - Corporate Financial Management *Units: 4*
- MGMT 6120 - Globalization, Innovation and Sustainability *Units: 4*
- MGMT 6215 - Business, Government and Society *Units: 4*
- MGMT 6220 - Operations and Supply Chain Management *Units: 4*
- MGMT 6225 - Executive Leadership *Units: 4*
- MKTG 6120 - Managerial Communication *Units: 4*
- MKTG 6215 - Marketing Management *Units: 4*

3. Capstone (4 units)

- ENTR 6800 - Entrepreneurship Practicum *Units: 4*
- or
- MGMT 6800 - Seminar in Strategic Management *Units: 4*

4. Electives or Option (12 units)

Students take any 3 courses at the 6100 level or beyond selected from ACCT, ECON, ENTR, FIN, ITM, MGMT, or MKTG. Courses cannot otherwise be used as part of their degree program.

or

Students select one of the individual MBA "Options" listed under Programs of Study.

Strategy and International Business Option (12 units)

- MGMT 6420 - Competitive Strategy *Units: 4*
- MGMT 6440 - Global Strategy *Units: 4*
- MGMT 6460 - Strategic Management for a Sustainable Society *Units: 4*

- MGMT 6470 - Management of Technology and Innovation *Units: 4*

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website or call 510.885.3661.

Transfer of Courses

Upper division prerequisite and foundation and graduate courses will only be considered for equivalency or transfer credit if they are from AACSB accredited institutions. Exceptions will be made for programs that have current and signed agreements with the College of Business and Economics.

Business Analytics Option, M.S.B.A.

Program Coordinators: Chongqi Wu and Jiming Wu, Department of Management

The Master of Science in Business Administration (M.S.B.A.), Business Analytics Option provides students with a balanced and broad set of knowledge and skills in Business Analytics, Business Intelligence, Database Management, and Data Warehousing. This degree offers students a focused specialty in how data analytics and business intelligence are applied in business organizations. The program objectives include:

- The M.S.B.A., Business Analytics Option will provide hands-on experience and in-depth study of important analytics topics including database management, data warehousing, big data technologies, data mining, business intelligence, and descriptive, predictive and prescriptive analytics along with popular software in data analytics.
- The M.S.B.A., Business Analytics Option will offer students an opportunity to apply business analytics to various business functions including marketing, finance, human resources, operations and supply chain management, etc.

Program Learning Outcomes

Students graduating with an M.S.B.A., Business Analytics Option from Cal State East Bay will be able to:

- Design, implement, and manage databases and data warehousing systems
- Acquire, validate, analyze and represent data and information for generating knowledge-based information systems
- Apply business intelligence and analytics skills in various areas of business and decision making.

Admission

The M.S.B.A. BA Option minimum admission requirements include:

- Baccalaureate degree with strong quantitative and computer programming background such as management science, finance, economics, computer science, engineering, basic science, etc. from an accredited college or university.
- Or a baccalaureate degree and at least 5 years of working experience in information technology.
- Past academic performance as reflected in undergraduate grade point average and subsequent coursework, i.e., an undergraduate degree with at least 2.5 Grade Point Average (or equivalent).
- For International students: demonstrated proof of English proficiency, e.g., TOEFL score of 550 (paper-based), 213 (computer-based) or 79 (Internet-based), or IELTS of 6.5 or above.

Proficiencies

- Demonstrated proficiency requirements in mathematics, statistics and programming with a grade of "C" or better and within 7 years of starting in the program, or at least 5 years of working experience in information technology.
- To satisfy the mathematics proficiency, you must have completed equivalent coursework in intermediate algebra. If you have not completed such coursework, you can take MATH 1130 or an equivalent course. The statistics requirement may be met by a course in statistics that is equivalent to

STAT 2010 or STAT 1000 . The programming requirement may be met by a course in computer science that is equivalent to CS 1160 .The decision on course equivalency in mathematics, statistics, and programming will be made by the respective Departments.

- All Conditionally Classified M.S.B.A. students must fulfill the University Writing Skills Requirement (UWSR) and M.S.B.A. program proficiencies. The Writing Skills Requirement could be met as an undergraduate or graduate student at one of the CSU system campuses, with a score of 4.5 or better on the GMAT essay, by passing the Writing Skills Test (WST) or through coursework. Information about the Writing Skills Test and the courses can be found on the Testing Office website. The Website contains information on test dates, registration procedures and fees. Further information can be obtained from the Testing Office, Library, Room LI 3165A, phone 510-885-3661. If students have not satisfied the UWSR before they begin their graduate work, they must either take the WST or enroll in a first tier course by the end of their first quarter in the program.

Requirements for Graduation

To be eligible for the M.S.B.A. you must have been Advanced to Candidacy (see the Graduate/Post-Baccalaureate Admission and Degree Information chapter of the catalog) and have completed 45-53 quarter units meeting the following criteria:

- All have a course grade of "C" or better.
- Have a combined 3.0 grade point average (minimum) in all units taken to satisfy the requirements of the student's degree program.
- Have no more than 13 units for extension and/or transfer credit (any extension and/or transfer credit must be approved by the Program Director) and/or coursework taken in "Unclassified Postbaccalaureate" status.
- All units earned within the five years immediately preceding the completion of the requirements for the degree.
- Have completed a satisfactory program of study, defined below.

1. Fundamental Coursework (0-8 units)

Fundamental coursework must be completed before enrolling in any M.S.B.A. required course. Fundamental courses may be waived if a student completed equivalent coursework for one or both fundamental courses, or completed the undergraduate version of these fundamental courses, i.e., ITM 3060 and MGMT 3100 , within the last 5 years with a grade of "C" or higher. Fundamental coursework can be also waived by passing an exam. Exams are offered once per quarter. There is a fee of \$25 for each exam. Please see the M.S.B.A. website or contact the CBE Graduate Programs Office (VBT 430, phone 510-885-2419) for dates and registration information.

- ITM 6015 Information Systems Development and Management *Units: 4*
- MGMT 6015 Data Analysis and Decision Modeling for Managers *Units: 4*
- ITM 6015 - Information Systems Development and Management *Units: 4*

2. Required Courses (24 units)

Required courses will be taught with modern data analytics programming languages and tools, e.g., SQL, Hadoop, SAS, R, Python, Excel-based add-ins, etc.

- ITM 6271 - Database Management and Applications *Units: 4*
- ITM 6273 - Knowledge Management *Units: 4*
- ITM 6280 - Data Warehousing *Units: 4*
- ITM 6285 - Data Mining *Units: 4*
- MGMT 6160 - Data Analytics *Units: 4*
- MGMT 6165 - Prescriptive Analytics *Units: 4*

3. Elective Courses (20 units)

Select five courses from the following:

- ECON 6511 - Advanced Applied Econometrics *Units: 4*
- FIN 6310 - Seminar in Security Analysis and Portfolio Management *Units: 4*
- ITM 6130 - Enterprise Management Systems *Units: 4*
- MGMT 6155 - Applied Project Management *Units: 4*
- MGMT 6622 - Human Resources Information Systems *Units: 4*
- MKTG 6401 - Marketing Research *Units: 4*

- STAT 6250 - SAS Programming *Units: 4*

One graduate course, not listed above (numbered 6000 or higher) may be substituted with approval of the graduate coordinator.

4. Capstone Experience (1 unit)

- ITM 6899 - Project *Units: 1*

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Chemistry, Biochemistry Option, M.S.

Program Description

The Master of Science degree provides students with advanced training in chemistry and the analytical skills needed to process and critique complex chemical information. Students may take most of the required coursework in chemistry or may choose a biochemistry option, with some required courses in chemistry and a specialization in biochemistry. The degree program mainly serves students in four categories: those seeking opportunities in the chemical industry requiring training beyond the baccalaureate level, fully employed chemists who wish to enhance their career potential, future teachers of high school or community college chemistry, and individuals contemplating more advanced graduate study.

Because of the rapid progress in the fields of chemistry and biochemistry, the department strives to offer a range of courses that cover not only established principles but also recent advances. Through laboratory-based coursework and research opportunities, students are prepared for new developments in experimental methods and instrumentation. They acquire experience reading and analyzing the chemical or biochemical literature in several courses, as well as through a research-based laboratory or computational project (Plan A) or by developing a written literature review (Plan B).

Student Learning Outcomes

Students graduating with a Master of Science in Chemistry will be able to:

- Demonstrate specialized knowledge in the chemical sciences beyond the undergraduate level;
- Work effectively and safely in a laboratory environment using modern chemical/biochemical instrumentation and methods to test hypotheses or design solutions to problems;
- Understand, organize, and critically assess information from the chemical literature
- Present complex chemical information via oral and written reports
- Work collaboratively in teams to solve chemical problems

Program Options

Within the Chemistry degree, candidates will choose one of four courses of study:

- M.S. Chemistry, Plan A
- M.S. Chemistry, Plan B
- M.S. Chemistry, Option in Biochemistry, Plan A
- M.S. Chemistry, Option in Biochemistry, Plan B

Both Plan A programs require a University Thesis, whereas both Plan B programs require completion of a literature review paper and passing terminal written and oral exams.

Faculty

The Department of Chemistry and Biochemistry has nine full-time faculty members; each has a Ph.D. degree. Most came to Cal State East Bay with postdoctoral experience either in academia or industry, or both. Added breadth of experience is provided by occasional visiting lecturers in graduate lecture courses.

Facilities

The laboratories are modern and well-equipped. Major instrumentation includes a 500 MHz nuclear magnetic resonance spectrometer (NMR), capillary gas chromatographs with both flame-ionization and mass-spectral detection (GC/MS), a fourier-transform infrared spectrophotometer (FTIR), an atomic absorption spectrophotometer (AA) with graphite furnace and cold vapor attachments, high performance liquid chromatograph (HPLC), ion chromatograph (IC), x-ray fluorescence spectrometer, and a diode-array visible-ultraviolet spectrophotometer that can be adapted for stopped-flow kinetics studies. A molecular modeling facility is available for instruction and research.

The department is served by an office staff of a department secretary and a part-time clerical assistant, and by a staff of four full-time technicians and one part-time person.

Additional Information

The masters' degree program is under the nominal direction of the graduate coordinator, with the participation of the department's Graduate Studies Committee. All inquiries should be directed to the graduate coordinator or to the department chair.

Admission Requirements

The basic requirements for entry into the program are possession of a baccalaureate degree in Chemistry or Biochemistry, including a year of physical chemistry, and a GPA of at least 2.6 in upper division chemistry and biochemistry courses. Applicants not meeting the GPA requirement may still be accepted subject to receipt of acceptable letters of recommendation. The G.R.E. is not required, however the GRE subject test in chemistry or biochemistry will be required for applications submitted after Fall Quarter 2015. Applicants not having an undergraduate major in chemistry or biochemistry may be accepted into the program depending on the amount of undergraduate coursework required to remove deficiencies.

Qualified applicants are accepted in "Conditionally Classified Graduate" status. To become fully "Classified Graduate," students must pass placement tests in organic, physical, and one of analytical, inorganic, or biochemistry; remove any deficiencies in the undergraduate major, complete 12 units applicable to the degree, and satisfy the University Writing Skills Requirement (UWSR).

Plan A, Thesis

A university thesis is required both for the M.S. Chemistry, Plan A and the M.S. Chemistry, Option in Biochemistry, Plan A degrees. A thesis topic is decided by mutual agreement between a graduate student and an appropriate faculty member.

Off-Campus Research

Candidates whose employers permit the use of appropriate facilities and approve the release of the applicable findings may arrange to conduct research on their employers' premises in support of their M.S. theses, subject to prior approval by the department.

Plan B, Comprehensive Examination

Plan B entails the completion of additional specified coursework in lieu of a thesis and completion of a significant literature search and report on a selected topic. Applicants must pass a comprehensive examination which consists of an oral portion covering the report of the literature search and a written portion covering all other coursework applied to the degree.

Advancement to Candidacy

In order to progress in the program, a student must pass or obtain a waiver for the placement exams. A waiver is usually obtained by enrolling in an undergraduate course covering appropriate material. The exams must be completed within one year of entry into the Department of Chemistry and Biochemistry. Additionally, students must satisfy the University Writing Skills Requirement and qualify for "Classified Graduate" status within two years of admission.

Advancement to Candidacy requires that the student complete 12 units in 6000-level courses applicable towards the degree with an average grade of 3.0 or better and select a research advisor for the thesis or a supervisor for the Plan B literature search and comprehensive examination.

Curricular Requirements

The M.S. programs in Chemistry provide for the degree to be obtained under Chemistry or Chemistry, Option in Biochemistry. Under either program, Plan A (University Thesis) or Plan B (Comprehensive Exam) must be selected.

M.S. Chemistry, Plan A

In order to be eligible for the degree, the student must satisfy the following departmental requirements:

1. Complete a total of 22 units in required courses in Chemistry comprising the following:

- CHEM 4521 - Elements of Chemical Thermodynamics *Units: 4*
- CHEM 6521 - The Chemical Bond *Units: 3*
- CHEM 6820 - Seminar *Units: 1*
- CHEM 6830 - Research *Units: 1-5*
- CHEM 6850 - Methods of Graduate Research *Units: 3*
- CHEM 6910 - University Thesis *Units: 1-3*

2. Complete a minimum of nine units from the Advanced Topics courses CHEM 6310 and 6510.

- CHEM 6310 - Advanced Topics in Organic Chemistry *Units: 3*
- CHEM 6510 - Advanced Topics in Physical Chemistry *Units: 3*

3. Complete additional units to total the minimum 45 units required

Complete additional units to total the minimum 45 units required--to be selected, with the approval of the student's advisor, from additional graduate courses in chemistry or biochemistry, or from the list of upper division courses in chemistry acceptable for the M.S. Chemistry, Plan A degree. No more than four units of CHEM 6900 and three units of CHEM 6830 may be included. A maximum of six units from applicable courses in related fields may be included (e.g., in physics, geological sciences, or mathematics), and additional units must be taken to replace any courses in (1) or (2) above that were taken as an undergraduate.

Upper Division Chemistry Courses Acceptable for the M.S. Chemistry, Plan A Degree:

- CHEM 4161 - Advanced Inorganic Chemistry *Units: 3*
- CHEM 4162 - Advanced Inorganic Chemistry *Units: 3*
- CHEM 4180 - Inorganic Chemistry Laboratory *Units: 2*
- CHEM 4240 - Instrumental Methods of Analysis *Units: 4*
- CHEM 4311 - Advanced Organic Chemistry *Units: 4*
- CHEM 4411 - General Biochemistry *Units: 4*
- CHEM 4412 - General Biochemistry *Units: 4*
- CHEM 4413 - General Biochemistry *Units: 4*
- CHEM 4430 - General Biochemistry Laboratory *Units: 4*
- CHEM 4431 - Advanced Biochemistry Laboratory *Units: 2*
- CHEM 4440 - Protein Structure *Units: 3*
- CHEM 4450 - Nucleic Acid Chemistry *Units: 3*
- CHEM 4460 - Major Organ Biochemistry *Units: 3*

- CHEM 4601 - Environmental Chemistry I *Units: 4*
- CHEM 4602 - Environmental Chemistry II *Units: 4*
- CHEM 4700 - Survey of Chemical Literature *Units: 2*
- CHEM 6430 - Protein Chemistry Techniques *Units: 4*

4. Submit to the department an acceptable master's degree thesis

- CHEM 6910 - University Thesis *Units: 1-3*

M.S. Chemistry, Plan B

In order to be eligible for the degree, the student must satisfy the following departmental requirements:

1. Complete a total of 21 units in required courses in Chemistry comprising the following:

- CHEM 4240 - Instrumental Methods of Analysis *Units: 4*
- CHEM 4521 - Elements of Chemical Thermodynamics *Units: 4*
- CHEM 4700 - Survey of Chemical Literature *Units: 2*
- CHEM 6521 - The Chemical Bond *Units: 3*
- CHEM 6820 - Seminar *Units: 1 (1, 1, 1)*
- CHEM 6850 - Methods of Graduate Research *Units: 3*
- CHEM 6901 - Comprehensive Review *Units: 2*

2. Complete a minimum of 12 units from the Advanced Topics courses CHEM 6310, 6410 and 6510.

- CHEM 6310 - Advanced Topics in Organic Chemistry *Units: 3*
- CHEM 6410 - Advanced Topics in Biochemistry *Units: 3*
- CHEM 6510 - Advanced Topics in Physical Chemistry *Units: 3*

3. Complete additional units to total the minimum 45 units required

Complete additional units to total the minimum 45 units required -- to be selected, with the approval of the student's advisor, from additional graduate courses in chemistry or biochemistry or from the list of upper division chemistry courses acceptable for the M.S. Chemistry, Plan B degree. No more than two units of CHEM 6900 and none of CHEM 6830 or CHEM 6910 may be included. A maximum of 12 units from applicable courses in related fields may be included, and additional units must be taken to replace any courses in (1) or (2) above that were taken as an undergraduate.

Upper Division Chemistry Courses Acceptable for the M.S. Chemistry, Plan B Degree:

- CHEM 3531 - Physical Chemistry Laboratory *Units: 2*
- CHEM 3532 - Physical Chemistry Laboratory *Units: 2*
- CHEM 4161 - Advanced Inorganic Chemistry *Units: 3*
- CHEM 4162 - Advanced Inorganic Chemistry *Units: 3*
- CHEM 4180 - Inorganic Chemistry Laboratory *Units: 2*
- CHEM 4311 - Advanced Organic Chemistry *Units: 4*
- CHEM 4411 - General Biochemistry *Units: 4*
- CHEM 4412 - General Biochemistry *Units: 4*
- CHEM 4413 - General Biochemistry *Units: 4*
- CHEM 4430 - General Biochemistry Laboratory *Units: 4*
- CHEM 4431 - Advanced Biochemistry Laboratory *Units: 2*
- CHEM 4440 - Protein Structure *Units: 3*
- CHEM 4450 - Nucleic Acid Chemistry *Units: 3*
- CHEM 4460 - Major Organ Biochemistry *Units: 3*
- CHEM 4601 - Environmental Chemistry I *Units: 4*

- CHEM 4602 - Environmental Chemistry II *Units: 4*
- CHEM 6430 - Protein Chemistry Techniques *Units: 4*

4. Complete a literature review paper and pass a comprehensive examination

Complete a literature review paper and pass a comprehensive examination consisting of an oral portion covering the review paper and a written portion covering coursework applied to the degree

- CHEM 6901 - Comprehensive Review *Units: 2*

M.S. Chemistry, Option in Biochemistry, Plan A

To be eligible for the Option in Biochemistry, M.S. in Chemistry, the student must satisfy the following departmental requirements:

1. Complete a total of 22 units in required courses in Chemistry comprising the following:

- CHEM 6410 - Advanced Topics in Biochemistry *Units: 3*
- CHEM 6430 - Protein Chemistry Techniques *Units: 4*
- CHEM 6820 - Seminar *Units: 1*
- CHEM 6830 - Research *Units: 1-5*
- CHEM 6850 - Methods of Graduate Research *Units: 3*
- CHEM 6910 - University Thesis *Units: 1-3*

2. Complete a minimum of six units from the following courses:

- CHEM 4521 - Elements of Chemical Thermodynamics *Units: 4*
- CHEM 6410 - Advanced Topics in Biochemistry *Units: 3*
- CHEM 6510 - Advanced Topics in Physical Chemistry *Units: 3*
- CHEM 6521 - The Chemical Bond *Units: 3*

including at least one of

- CHEM 4521 - Elements of Chemical Thermodynamics *Units: 4*
- CHEM 6521 - The Chemical Bond *Units: 3*

3. Complete additional units to total the minimum 45 units required

Complete additional units to total the minimum 45 units required -- to be selected, with the approval of the student's advisor, from additional graduate courses in chemistry and biochemistry or from the list of upper division chemistry courses acceptable for the M.S. Chemistry, Biochemistry Option, Plan A degree. No more than four units of CHEM 6900 and three units of CHEM 6830 may be included. A maximum of ten units from applicable courses in Biological Sciences may be selected from the following:

- BIOL 4450 - Cell Culture Techniques *Units: 4*
- BIOL 4490 - Bioinformatics *Units: 4*
- BIOL 6141 - Advanced Molecular Techniques *Units: 4*
- BIOL 6151 - Cell and Molecular Biology I *Units: 5*
- BIOL 6152 - Cell and Molecular Biology II *Units: 5*

Additional units must be selected to replace any courses in (1) and (2) above taken as an undergraduate.

Upper Division Chemistry Courses Acceptable for the M.S. Chemistry, Biochemistry Option, Plan A Degree:

- CHEM 3531 - Physical Chemistry Laboratory *Units: 2*
- CHEM 3532 - Physical Chemistry Laboratory *Units: 2*

- CHEM 4161 - Advanced Inorganic Chemistry *Units: 3*
- CHEM 4162 - Advanced Inorganic Chemistry *Units: 3*
- CHEM 4180 - Inorganic Chemistry Laboratory *Units: 2*
- CHEM 4240 - Instrumental Methods of Analysis *Units: 4*
- CHEM 4311 - Advanced Organic Chemistry *Units: 4*
- CHEM 4440 - Protein Structure *Units: 3*
- CHEM 4450 - Nucleic Acid Chemistry *Units: 3*
- CHEM 4460 - Major Organ Biochemistry *Units: 3*
- CHEM 4601 - Environmental Chemistry I *Units: 4*
- CHEM 4602 - Environmental Chemistry II *Units: 4*
- CHEM 4700 - Survey of Chemical Literature *Units: 2*

4. Submit to the department an acceptable master's degree thesis

- CHEM 6910 - University Thesis *Units: 1-3*

M.S. Chemistry, Option in Biochemistry, Plan B

1. Prerequisite: One year of undergraduate biochemistry.

2. Complete a total of 21 units in the following required chemistry courses:

- CHEM 4240 - Instrumental Methods of Analysis *Units: 4*
 - CHEM 6430 - Protein Chemistry Techniques *Units: 4*
 - CHEM 4700 - Survey of Chemical Literature *Units: 2*
 - CHEM 6521 - The Chemical Bond *Units: 3*
- or
- CHEM 4521 - Elements of Chemical Thermodynamics *Units: 4*
 - CHEM 6820 - Seminar *Units: 1*
 - CHEM 6850 - Methods of Graduate Research *Units: 3*
 - CHEM 6901 - Comprehensive Review *Units: 2*

3. Complete a minimum of 12 units from the Advanced Topics courses CHEM 6310, 6410, and 6510.

- CHEM 6310 - Advanced Topics in Organic Chemistry *Units: 3*
- CHEM 6410 - Advanced Topics in Biochemistry *Units: 3*
- CHEM 6510 - Advanced Topics in Physical Chemistry *Units: 3*

4. Complete additional units to total the minimum 45 units required

Complete additional units to total the minimum 45 units required--to be selected, with the approval of the student's advisor, from additional graduate courses in chemistry and biochemistry or from the list of upper division chemistry courses acceptable for the M.S. Chemistry, Biochemistry Option, Plan B degree. No more than two units of CHEM 6900 and none of CHEM 6830 or CHEM 6910 may be included. A maximum of ten units from applicable courses in Biological Sciences may be selected from the following:

- BIOL 4450 - Cell Culture Techniques *Units: 4*
- BIOL 4490 - Bioinformatics *Units: 4*
- BIOL 6141 - Advanced Molecular Techniques *Units: 4*
- BIOL 6151 - Cell and Molecular Biology I *Units: 5*
- BIOL 6152 - Cell and Molecular Biology II *Units: 5*

Additional units must be taken to replace any courses in (1) or (2) above that were taken as an undergraduate.

Upper Division Chemistry Courses Acceptable for the M.S. Chemistry, Biochemistry Option, Plan B Degree:

- CHEM 3531 - Physical Chemistry Laboratory *Units: 2*
- CHEM 3532 - Physical Chemistry Laboratory *Units: 2*
- CHEM 4161 - Advanced Inorganic Chemistry *Units: 3*
- CHEM 4162 - Advanced Inorganic Chemistry *Units: 3*
- CHEM 4180 - Inorganic Chemistry Laboratory *Units: 2*
- CHEM 4311 - Advanced Organic Chemistry *Units: 4*
- CHEM 4440 - Protein Structure *Units: 3*
- CHEM 4450 - Nucleic Acid Chemistry *Units: 3*
- CHEM 4460 - Major Organ Biochemistry *Units: 3*
- CHEM 4601 - Environmental Chemistry I *Units: 4*
- CHEM 4602 - Environmental Chemistry II *Units: 4*

5. Complete a literature review paper and pass a comprehensive examination

Complete a literature review paper and pass a comprehensive examination consisting of an oral portion covering the review paper and a written portion covering coursework applied to the degree

- CHEM 6901 - Comprehensive Review *Units: 2*

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Chemistry, M.S.

Program Description

The Master of Science degree provides students with advanced training in chemistry and the analytical skills needed to process and critique complex chemical information. Students may take most of the required coursework in chemistry or may choose a biochemistry option, with some required courses in chemistry and a specialization in biochemistry. The degree program mainly serves students in four categories: those seeking opportunities in the chemical industry requiring training beyond the baccalaureate level, fully employed chemists who wish to enhance their career potential, future teachers of high school or community college chemistry, and individuals contemplating more advanced graduate study.

Because of the rapid progress in the fields of chemistry and biochemistry, the department strives to offer a range of courses that cover not only established principles but also recent advances. Through laboratory-based coursework and research opportunities, students are prepared for new developments in experimental methods and instrumentation. They acquire experience reading and analyzing the chemical or biochemical literature in several courses, as well as through a research-based laboratory or computational project (Plan A) or by developing a written literature review (Plan B).

Student Learning Outcomes

Students graduating with a Master of Science in Chemistry will be able to:

- Demonstrate specialized knowledge in the chemical sciences beyond the undergraduate level;

- Work effectively and safely in a laboratory environment using modern chemical/biochemical instrumentation and methods to test hypotheses or design solutions to problems;
- Understand, organize, and critically assess information from the chemical literature
- Present complex chemical information via oral and written reports
- Work collaboratively in teams to solve chemical problems

Program Options

Within the Chemistry degree, candidates will choose one of four courses of study:

- M.S. Chemistry, Plan A
- M.S. Chemistry, Plan B
- M.S. Chemistry, Option in Biochemistry, Plan A
- M.S. Chemistry, Option in Biochemistry, Plan B

Both Plan A programs require a University Thesis, whereas both Plan B programs require completion of a literature review paper and passing terminal written and oral exams.

Faculty

The Department of Chemistry and Biochemistry has nine full-time faculty members; each has a Ph.D. degree. Most came to Cal State East Bay with postdoctoral experience either in academia or industry, or both. Added breadth of experience is provided by occasional visiting lecturers in graduate lecture courses.

Facilities

The laboratories are modern and well-equipped. Major instrumentation includes a 500 MHz nuclear magnetic resonance spectrometer (NMR), capillary gas chromatographs with both flame-ionization and mass-spectral detection (GC/MS), a fourier-transform infrared spectrophotometer (FTIR), an atomic absorption spectrophotometer (AA) with graphite furnace and cold vapor attachments, high performance liquid chromatograph (HPLC), ion chromatograph (IC), x-ray fluorescence spectrometer, and a diode-array visible-ultraviolet spectrophotometer that can be adapted for stopped-flow kinetics studies. A molecular modeling facility is available for instruction and research.

The department is served by an office staff of a department secretary and a part-time clerical assistant, and by a staff of four full-time technicians and one part-time person.

Additional Information

The masters' degree program is under the nominal direction of the graduate coordinator, with the participation of the department's Graduate Studies Committee. All inquiries should be directed to the graduate coordinator or to the department chair.

Admission Requirements

The basic requirements for entry into the program are possession of a baccalaureate degree in Chemistry or Biochemistry, including a year of physical chemistry, and a GPA of at least 2.6 in upper division chemistry and biochemistry courses. Applicants not meeting the GPA requirement may still be accepted subject to receipt of acceptable letters of recommendation. The G.R.E. is not required, however the GRE subject test in chemistry or biochemistry will be required for applications submitted after Fall Quarter 2015. Applicants not having an undergraduate major in chemistry or biochemistry may be accepted into the program depending on the amount of undergraduate coursework required to remove deficiencies.

Qualified applicants are accepted in "Conditionally Classified Graduate" status. To become fully "Classified Graduate," students must pass placement tests in organic, physical, and one of analytical, inorganic, or biochemistry; remove any deficiencies in the undergraduate major, complete 12 units applicable to the degree, and satisfy the University Writing Skills Requirement (UWSR).

Plan A, Thesis

A university thesis is required both for the M.S. Chemistry, Plan A and the M.S. Chemistry, Option in Biochemistry, Plan A degrees. A thesis topic is decided by mutual agreement between a graduate student and an appropriate faculty member.

Off-Campus Research

Candidates whose employers permit the use of appropriate facilities and approve the release of the applicable findings may arrange to conduct research on their employers' premises in support of their M.S. theses, subject to prior approval by the department.

Plan B, Comprehensive Examination

Plan B entails the completion of additional specified coursework in lieu of a thesis and completion of a significant literature search and report on a selected topic. Applicants must pass a comprehensive examination which consists of an oral portion covering the report of the literature search and a written portion covering all other coursework applied to the degree.

Advancement to Candidacy

In order to progress in the program, a student must pass or obtain a waiver for the placement exams. A waiver is usually obtained by enrolling in an undergraduate course covering appropriate material. The exams must be completed within one year of entry into the Department of Chemistry and Biochemistry. Additionally, students must satisfy the University Writing Skills Requirement and qualify for "Classified Graduate" status within two years of admission.

Advancement to Candidacy requires that the student complete 12 units in 6000-level courses applicable towards the degree with an average grade of 3.0 or better and select a research advisor for the thesis or a supervisor for the Plan B literature search and comprehensive examination.

Curricular Requirements

The M.S. programs in Chemistry provide for the degree to be obtained under Chemistry or Chemistry, Option in Biochemistry. Under either program, Plan A (University Thesis) or Plan B (Comprehensive Exam) must be selected.

M.S. Chemistry, Plan A

In order to be eligible for the degree, the student must satisfy the following departmental requirements:

1. Complete a total of 22 units in required courses in Chemistry comprising the following:

- CHEM 4521 - Elements of Chemical Thermodynamics *Units: 4*
- CHEM 6521 - The Chemical Bond *Units: 3*
- CHEM 6820 - Seminar *Units: 1*
- CHEM 6830 - Research *Units: 1-5*
- CHEM 6850 - Methods of Graduate Research *Units: 3*
- CHEM 6910 - University Thesis *Units: 1-3*

2. Complete a minimum of nine units from the Advanced Topics courses CHEM 6310 and 6510.

- CHEM 6310 - Advanced Topics in Organic Chemistry *Units: 3*
- CHEM 6510 - Advanced Topics in Physical Chemistry *Units: 3*

3. Complete additional units to total the minimum 45 units required

Complete additional units to total the minimum 45 units required--to be selected, with the approval of the student's advisor, from additional graduate courses in chemistry or biochemistry, or from the list of upper division courses in chemistry acceptable for the M.S. Chemistry, Plan A degree. No more than four units of CHEM 6900 and three units of CHEM 6830 may be included. A maximum of six units from applicable courses in related fields may be included (e.g., in physics, geological sciences, or mathematics), and additional units must be taken to replace any courses in (1) or (2) above that were taken as an undergraduate.

Upper Division Chemistry Courses Acceptable for the M.S. Chemistry, Plan A Degree:

- CHEM 4161 - Advanced Inorganic Chemistry *Units: 3*
- CHEM 4162 - Advanced Inorganic Chemistry *Units: 3*
- CHEM 4180 - Inorganic Chemistry Laboratory *Units: 2*
- CHEM 4240 - Instrumental Methods of Analysis *Units: 4*
- CHEM 4311 - Advanced Organic Chemistry *Units: 4*
- CHEM 4411 - General Biochemistry *Units: 4*
- CHEM 4412 - General Biochemistry *Units: 4*
- CHEM 4413 - General Biochemistry *Units: 4*
- CHEM 4430 - General Biochemistry Laboratory *Units: 4*
- CHEM 4431 - Advanced Biochemistry Laboratory *Units: 2*
- CHEM 4440 - Protein Structure *Units: 3*
- CHEM 4450 - Nucleic Acid Chemistry *Units: 3*
- CHEM 4460 - Major Organ Biochemistry *Units: 3*
- CHEM 4601 - Environmental Chemistry I *Units: 4*
- CHEM 4602 - Environmental Chemistry II *Units: 4*
- CHEM 4700 - Survey of Chemical Literature *Units: 2*
- CHEM 6430 - Protein Chemistry Techniques *Units: 4*

4. Submit to the department an acceptable master's degree thesis

- CHEM 6910 - University Thesis *Units: 1-3*

M.S. Chemistry, Plan B

In order to be eligible for the degree, the student must satisfy the following departmental requirements:

1. Complete a total of 21 units in required courses in Chemistry comprising the following:

- CHEM 4240 - Instrumental Methods of Analysis *Units: 4*
- CHEM 4521 - Elements of Chemical Thermodynamics *Units: 4*
- CHEM 4700 - Survey of Chemical Literature *Units: 2*
- CHEM 6521 - The Chemical Bond *Units: 3*
- CHEM 6820 - Seminar *Units: 1 (1, 1, 1)*
- CHEM 6850 - Methods of Graduate Research *Units: 3*
- CHEM 6901 - Comprehensive Review *Units: 2*

2. Complete a minimum of 12 units from the Advanced Topics courses CHEM 6310, 6410 and 6510.

- CHEM 6310 - Advanced Topics in Organic Chemistry *Units: 3*
- CHEM 6410 - Advanced Topics in Biochemistry *Units: 3*
- CHEM 6510 - Advanced Topics in Physical Chemistry *Units: 3*

3. Complete additional units to total the minimum 45 units required

Complete additional units to total the minimum 45 units required -- to be selected, with the approval of the student's advisor, from additional graduate courses in chemistry or biochemistry or from the list of upper division chemistry courses acceptable for the M.S. Chemistry, Plan B degree. No more than two units of CHEM 6900 and none of CHEM 6830 or CHEM 6910 may be included. A maximum of 12 units from applicable courses in related fields may be included, and additional units must be taken to replace any courses in (1) or (2) above that were taken as an undergraduate.

Upper Division Chemistry Courses Acceptable for the M.S. Chemistry, Plan B Degree:

- CHEM 3531 - Physical Chemistry Laboratory *Units: 2*
- CHEM 3532 - Physical Chemistry Laboratory *Units: 2*
- CHEM 4161 - Advanced Inorganic Chemistry *Units: 3*
- CHEM 4162 - Advanced Inorganic Chemistry *Units: 3*
- CHEM 4180 - Inorganic Chemistry Laboratory *Units: 2*
- CHEM 4311 - Advanced Organic Chemistry *Units: 4*
- CHEM 4411 - General Biochemistry *Units: 4*
- CHEM 4412 - General Biochemistry *Units: 4*
- CHEM 4413 - General Biochemistry *Units: 4*
- CHEM 4430 - General Biochemistry Laboratory *Units: 4*
- CHEM 4431 - Advanced Biochemistry Laboratory *Units: 2*
- CHEM 4440 - Protein Structure *Units: 3*
- CHEM 4450 - Nucleic Acid Chemistry *Units: 3*
- CHEM 4460 - Major Organ Biochemistry *Units: 3*
- CHEM 4601 - Environmental Chemistry I *Units: 4*
- CHEM 4602 - Environmental Chemistry II *Units: 4*
- CHEM 6430 - Protein Chemistry Techniques *Units: 4*

4. Complete a literature review paper and pass a comprehensive examination

Complete a literature review paper and pass a comprehensive examination consisting of an oral portion covering the review paper and a written portion covering coursework applied to the degree

- CHEM 6901 - Comprehensive Review *Units: 2*

M.S. Chemistry, Option in Biochemistry, Plan A

To be eligible for the Option in Biochemistry, M.S. in Chemistry, the student must satisfy the following departmental requirements:

1. Complete a total of 22 units in required courses in Chemistry comprising the following:

- CHEM 6410 - Advanced Topics in Biochemistry *Units: 3*
- CHEM 6430 - Protein Chemistry Techniques *Units: 4*
- CHEM 6820 - Seminar *Units: 1*
- CHEM 6830 - Research *Units: 1-5*
- CHEM 6850 - Methods of Graduate Research *Units: 3*
- CHEM 6910 - University Thesis *Units: 1-3*

2. Complete a minimum of six units from the following courses:

- CHEM 4521 - Elements of Chemical Thermodynamics *Units: 4*
- CHEM 6410 - Advanced Topics in Biochemistry *Units: 3*
- CHEM 6510 - Advanced Topics in Physical Chemistry *Units: 3*
- CHEM 6521 - The Chemical Bond *Units: 3*

including at least one of

- CHEM 4521 - Elements of Chemical Thermodynamics *Units: 4*
- CHEM 6521 - The Chemical Bond *Units: 3*

3. Complete additional units to total the minimum 45 units required

Complete additional units to total the minimum 45 units required -- to be selected, with the approval of the student's advisor, from additional graduate courses in chemistry and biochemistry or from the list of upper division chemistry courses acceptable for the M.S. Chemistry,

Biochemistry Option, Plan A degree. No more than four units of CHEM 6900 and three units of CHEM 6830 may be included. A maximum of ten units from applicable courses in Biological Sciences may be selected from the following:

- BIOL 4450 - Cell Culture Techniques *Units: 4*
- BIOL 4490 - Bioinformatics *Units: 4*
- BIOL 6141 - Advanced Molecular Techniques *Units: 4*
- BIOL 6151 - Cell and Molecular Biology I *Units: 5*
- BIOL 6152 - Cell and Molecular Biology II *Units: 5*

Additional units must be selected to replace any courses in (1) and (2) above taken as an undergraduate.

Upper Division Chemistry Courses Acceptable for the M.S. Chemistry, Biochemistry Option, Plan A Degree:

- CHEM 3531 - Physical Chemistry Laboratory *Units: 2*
- CHEM 3532 - Physical Chemistry Laboratory *Units: 2*
- CHEM 4161 - Advanced Inorganic Chemistry *Units: 3*
- CHEM 4162 - Advanced Inorganic Chemistry *Units: 3*
- CHEM 4180 - Inorganic Chemistry Laboratory *Units: 2*
- CHEM 4240 - Instrumental Methods of Analysis *Units: 4*
- CHEM 4311 - Advanced Organic Chemistry *Units: 4*
- CHEM 4440 - Protein Structure *Units: 3*
- CHEM 4450 - Nucleic Acid Chemistry *Units: 3*
- CHEM 4460 - Major Organ Biochemistry *Units: 3*
- CHEM 4601 - Environmental Chemistry I *Units: 4*
- CHEM 4602 - Environmental Chemistry II *Units: 4*
- CHEM 4700 - Survey of Chemical Literature *Units: 2*

4. Submit to the department an acceptable master's degree thesis

- CHEM 6910 - University Thesis *Units: 1-3*

M.S. Chemistry, Option in Biochemistry, Plan B

1. Prerequisite: One year of undergraduate biochemistry.

2. Complete a total of 21 units in the following required chemistry courses:

- CHEM 4240 - Instrumental Methods of Analysis *Units: 4*
- CHEM 6430 - Protein Chemistry Techniques *Units: 4*
- CHEM 4700 - Survey of Chemical Literature *Units: 2*

- CHEM 6521 - The Chemical Bond *Units: 3*
- or
- CHEM 4521 - Elements of Chemical Thermodynamics *Units: 4*

- CHEM 6820 - Seminar *Units: 1*
- CHEM 6850 - Methods of Graduate Research *Units: 3*
- CHEM 6901 - Comprehensive Review *Units: 2*

3. Complete a minimum of 12 units from the Advanced Topics courses CHEM 6310, 6410, and 6510.

- CHEM 6310 - Advanced Topics in Organic Chemistry *Units: 3*
- CHEM 6410 - Advanced Topics in Biochemistry *Units: 3*

- CHEM 6510 - Advanced Topics in Physical Chemistry *Units: 3*

4. Complete additional units to total the minimum 45 units required

Complete additional units to total the minimum 45 units required--to be selected, with the approval of the student's advisor, from additional graduate courses in chemistry and biochemistry or from the list of upper division chemistry courses acceptable for the M.S. Chemistry, Biochemistry Option, Plan B degree. No more than two units of CHEM 6900 and none of CHEM 6830 or CHEM 6910 may be included. A maximum of ten units from applicable courses in Biological Sciences may be selected from the following:

- BIOL 4450 - Cell Culture Techniques *Units: 4*
- BIOL 4490 - Bioinformatics *Units: 4*
- BIOL 6141 - Advanced Molecular Techniques *Units: 4*
- BIOL 6151 - Cell and Molecular Biology I *Units: 5*
- BIOL 6152 - Cell and Molecular Biology II *Units: 5*

Additional units must be taken to replace any courses in (1) or (2) above that were taken as an undergraduate.

Upper Division Chemistry Courses Acceptable for the M.S. Chemistry, Biochemistry Option, Plan B Degree:

- CHEM 3531 - Physical Chemistry Laboratory *Units: 2*
- CHEM 3532 - Physical Chemistry Laboratory *Units: 2*
- CHEM 4161 - Advanced Inorganic Chemistry *Units: 3*
- CHEM 4162 - Advanced Inorganic Chemistry *Units: 3*
- CHEM 4180 - Inorganic Chemistry Laboratory *Units: 2*
- CHEM 4311 - Advanced Organic Chemistry *Units: 4*
- CHEM 4440 - Protein Structure *Units: 3*
- CHEM 4450 - Nucleic Acid Chemistry *Units: 3*
- CHEM 4460 - Major Organ Biochemistry *Units: 3*
- CHEM 4601 - Environmental Chemistry I *Units: 4*
- CHEM 4602 - Environmental Chemistry II *Units: 4*

5. Complete a literature review paper and pass a comprehensive examination

Complete a literature review paper and pass a comprehensive examination consisting of an oral portion covering the review paper and a written portion covering coursework applied to the degree

- CHEM 6901 - Comprehensive Review *Units: 2*

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Communication, M.A.

The Department of Communication offers graduate study leading to the Master of Arts degree in Communication. The candidate must observe the general requirements for the Master of Arts degree stated in the Graduate/Post-Baccalaureate Admission and Degree Information chapter in this catalog as well as specific departmental requirements stated here and more fully in the Graduate Handbook issued by the department (copies available upon request). University requirements include the 32-unit residence requirement, the 5-year rule in currency of subject matter, the minimum number of units of 6000-level courses, a 3.00 GPA, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

The candidate is also responsible for:

- consulting an advisor and planning a tentative program with that advisor.
- completing the prerequisites to the program and all program requirements.

Important Forms

Graduate Student Plan of Study Form

Graduate Advisory Committee Form

Program Description

Students who complete the Master of Arts degree in Communication will gain understanding and expertise in media studies, organizational and interpersonal communication. By enabling them to critically analyze and improve spoken and written messages, the program prepares students to play valuable roles in business, industry, government, and education; to pursue doctoral study; and to communicate effectively in day-to-day life.

The study of Communication includes theories and critical methods of rhetoric and communication, as well as critical analysis of messages as they occur within and across public, interpersonal, and organizational contexts, and across disciplines. The department focuses upon relating theory to practice in ways that recognize and explore the profound influences of ethics and cultural experience on how we communicate. Cal State East Bay's Communication program is widely and highly regarded for its excellence in preparing business, government, teaching professionals, and Ph.D. students.

Student Learning Outcomes

Students graduating with an M.A. in Communication will be able to:

- Engage critical and creative thinking toward a convergent praxis of theory and applications relevant to tensions, transitions, and transformation in the communication discipline;
- Develop a program of original research adding to the discovery of knowledge, theory and practical applications toward issues in the communication discipline;
- Demonstrate results of original research development in the communication discipline through presentation in written, oral, and mediated formats;
- Develop critical and cultural perspectives toward the role of the communication discipline in promoting equity, social justice, and solutions to complex problems in various communities.

Career Opportunities

Students with an M.A. in Communication are educated to speak, think, and write clearly and effectively. Because these are highly-sought-after skills, graduates are valuable employees in many jobs, including but not limited to teaching, consulting, human resources, personnel, communication training in organizations, management, banking, sales, government, and politics. The degree is also excellent preparation for Ph.D. and law degrees.

Faculty: Areas of Specialization

The graduate faculty is comprised of seven professors committed to teaching excellence and research. The faculty are well respected and are involved in professional organizations, in campus activities, and in community service.

Katherine Bell, Ph.D., University of Washington

Lonny Brooks, Ph.D. 2004, University of California, San Diego; M.L.I.S. 1995, University of California, Los Angeles: organizational communication, information technologies, critical ethnography, communication theory and research

Mary Cardaras, Ph.D., Northeastern University

Grant Kien, Ph.D., 2006, University of Illinois at Champaign-Urbana, M.A., 2002, York University: technography, technology and organizational/social change, digital media and culture, qualitative research, globalization.

Sally Murphy, Ph.D. 1986, University of Minnesota; M.A. 1975, University of New Mexico: conversation analysis, research methods, persuasion theory, communication theory, teaching speech communication-on reassignment to General Education

Robert Terrell, Ph.D., 1978 University of California, Berkeley, M.A., 1973, U.C. Berkeley: mass communication, journalism, photojournalism, media and social justice.

Terry West, Ph.D., 1994, Southern Illinois University, M.A., 1985, Southwest Missouri State University (now Missouri State University): communication education, argumentation, critical thinking, persuasion, forensics, debate.

Gale Young, Ph.D. 1978, University of California, Los Angeles; M.A. 1970, University of California, Los Angeles: intercultural communication, interpersonal communication, communication theory

Areas of Emphasis

Students in the department take regularly-offered seminars and upper division courses in organizational communication, interpersonal communication, media studies, and intercultural communication. In addition, students may choose among special-topics seminars, upper division courses, and independent study. Advisors work with students to create programs of study that meet their goals.

Features

Teaching Associates: Qualified students may be granted opportunities to teach, to assist in forensics, or to assist a professor on a project. To be eligible for consideration in teaching COMM 1000 and/or COMM 1004, students must show satisfactory achievement in COMM 6250 (Teaching Public Speaking and Interpersonal Communication), successful completion of specified coursework, and must have mentored with a faculty member in the course(s) they wish to teach. Interested students should consult with the Graduate Coordinator or the department Chair.

Communication Laboratory: In addition to classroom study of interpersonal, intercultural, organizational, and public communication, we sponsor a Communication Laboratory open to the campus community that provides communication-related support services. Upper division Communication majors and graduate students serve as tutors who help students research, organize, outline, and deliver oral presentations. Students are encouraged to volunteer in the Lab to gain valuable teaching experience and to serve other students. Graduate students may also serve as paid lab assistants.

The Pioneer, the University's weekly student newspaper, currently distributed on our campus and to 150 stands in 7 surrounding communities, from Fremont to San Lorenzo including 5 BART stations as well as globally through The Pioneer Online <http://www.thepioneeronline.com/>

Pioneer Web TV <http://pioneerwebtv.com>. Students gain experience working in a professional television and film studio producing the weekly Pioneer Web TV News Show and increasingly a number of pilot shows.

Pioneer Web Radio <http://www.pioneerwebtv.com/PioneerWebTV/Podcast.html>. Students gain professional experience with Internet radio startup and providing the campus communities with news, event updates, special profiles and web-streaming for concerts.

Pioneer Advertising Agency. Students gain experience working in and studying an actual Advertising Agency. They sell Ads for the Pioneer Newspaper, design and implement strategies to sell ads for The Pioneer On-line, and commercials for Pioneer Web TV.

Work Study: If you are interested in the work study program, consult with the Financial Aid Office, 3rd Floor, Student Services and Administration.

Internships: With the permission of your committee chair, students may earn up to four units of internship credit by working in the Communication Lab, by mentoring in COMM 1000 or COMM 1004, by internship through Co-op Education, by internship in Organizational Communication, or by other work-related internships.

Scholarships and Awards

- The Karl Robinson Scholarship is awarded to outstanding Communication students and M.A. candidates who show potential for excellence in scholarly achievement.
- The Outstanding Graduate Student Award is given to students who demonstrate outstanding scholarship, leadership, and contribution to the program.
- The Outstanding Teaching Associate Award is given to students who demonstrate outstanding performance in teaching.

Admission

Application for admission includes two parts:

- submit the university application form, with fee, to the Admissions Office, Student Services and Administration Building, Cal State East Bay, Hayward, CA 94542;
- submit the department application form, a statement of purpose, three letters of recommendation, and a sample of scholarly writing to the Graduate Coordinator, Department of Communication, Cal State East Bay, Hayward, CA 94542. Both university and department application forms are available on the Department of Communication website. You may be admitted under one of the following:

"Classified Graduate" Standing

For admission with "Classified Graduate" standing to the M.A. program in Communication, students must:

- submit an application to pursue a specific program of graduate study and be accepted by the department and the university
- have completed a baccalaureate major in Communication from an accredited institution, or appropriate preparatory coursework approved by the faculty
- have maintained an overall grade point average of at least 3.00, and
- satisfied the University Writing Skills Requirement.

"Conditionally Classified Graduate" Standing

If a student's communication major did not include prerequisite courses, if a student's degree is in another field, or if the University Writing Skills Requirement has not been satisfied, it may be possible to be admitted with "Conditionally Classified Graduate" standing. In this case, students are admitted graduate students but have conditions to meet. Student status will remain conditional until the work is completed with a minimum of "B" or better grades and the Writing Skills Test has been passed. (See the following section, "Degree Requirements," for prerequisite courses.)

Degree Requirements

The M.A. in Communication requires completion of 45 units in an approved program of study, with a "B" (3.0) or better.

Up to 12 units at the 4000 level may count toward graduation.

Up to 12 units of Independent Study may be taken (by advisor approval) which may also count towards your degree. No more than two Independent Study units may be taken as mentee or intern credit.

Up to 12 units of graduate seminars outside the Communication Department may be taken (by advisor approval) at or above the 4000 level.

All courses are four units unless otherwise specified. In cases of transferred credit, a minimum of 32 units must be completed at CSU East Bay.

Writing Skills Requirement

All students must meet the University Writing Skills Requirement (UWSR) to become fully "Classified Graduate" students. Graduate students must begin satisfaction of this requirement in their first quarter of their residency.

Attainment of "Classified Graduate" Standing

To attain "Classified Graduate" standing, a student must have completed all prerequisites with grades of "B" or better and satisfied the University Writing Skills Requirement. Notify the graduate advisor immediately upon completion, and request that s(he) complete the necessary paper work.

Advancement to Candidacy

To be Advanced to Candidacy for the M.A. degree in Communication, the student must:

- be a "Classified Graduate" student in good standing;
- complete 12 quarter units beyond the prerequisites with at least "B" grades;
- choose a program advisor;
- submit a study plan for completion of the degree program to the program advisor;
- have the thesis proposal or project proposal approved by their graduate adviser, if applicable;
- show evidence of progress and ability to complete the program.

Capstone Experiences

- **Project (5 units):** Upon approval of his/her graduate committee, a student may elect the Project option (5 units); enrollment commits the student to a production of a piece of work which is to follow prescribed forms; a permanent record is to be filed in the departmental office.
- **University Thesis (9 units):** Upon approval of his/her graduate committee, a student may elect the University Thesis; s/he will carry out research on a specific topic in the field and will report, review, and file the results; s/he will be examined on the thesis (see 3, below under "Examinations" heading); the University Thesis carries 9 units of credit.
- **Comprehensive Examination:** A student may elect a program made up entirely of a minimum of 45 units of approved coursework, including COMM 6901 - Comprehensive Examination Preparation. A comprehensive examination must be passed.

Examinations

- Students electing the Project option (5 units) will sit for a two-hour oral defense of their project at its completion.
- Students electing the University Thesis option will sit for a two-hour oral defense of the thesis at its completion.
- Satisfactory achievement on comprehensive written and oral examinations will be required of students electing the coursework and project options. For the comprehensive examinations, the student will be tested on all coursework taken during their graduate study, including all required courses and any coursework in progress during the quarter of examination.

Curricular Requirements

I. Required Courses (12 units)

A. Take both of the following in the first year of study (8 units)

- COMM 6000 - Introduction to Graduate Study *Units: 4*
- COMM 6010 - Seminar in Theories in Communication *Units: 4*

B. Select at least one course from the following in the first year of study (4 units)

- COMM 6040 - Advanced Qualitative Research Methods *Units:*
- COMM 6050 - Advanced Quantitative Research Methods *Units:*

II. Cluster Courses (12 units)

Select at least three courses in the cluster of your choice (12 units; more may be taken).

Cluster 1: Communication Studies (12 units)

Any combination of 12 units taken from all clusters with advisor's approval.

Cluster 2: Media Studies (12 units)

Required:

- COMM 6300 - Seminar in Media Studies *Units: 4*

Select at least two courses from the following:

- COMM 6020 - Seminar in Communication, Media, and Society *Units: 4*
- COMM 6450 - Seminar in Globalization and Media *Units: 4*
- COMM 6550 - Seminar in Critical Cultural Studies *Units: 4*
- COMM 6551 - Critical Ethnic Media Studies *Units: 4*

Cluster 3: Organizational and Interpersonal Communication (12 units)

Required:

- COMM 6400 - Seminar in Rhetorical Studies *Units: 4*

Select at least two courses from the following:

- COMM 6600 - Seminar in Organizational Communication *Units: 4*
- COMM 6810 Seminar in Intercultural Communication *Units: 4*
- COMM 6850 - Professional Communication *Units: 4* (covering facilitation, corporate communication and communications consulting)
- COMM 6100 - Topics in Speech Communication *Units: 4* (may be repeated)
- COMM 6900 - Independent Study *Units: 1-4*

III. Electives (12-20 units)

The number of elective units you take is determined by the Capstone Experience you choose in IV, below (e.g. 16 units of electives with a 5-unit Special Project). Total units for III. Electives and IV. Capstone Experience must be 21. Total units for degree is 45.

Qualifying 4000 and 6000 level departmental and non-departmental courses to be approved in advance of every quarter, as per the University course calendar.

IV. Capstone Experience (1-9 units)

The M.A. degree may be completed in one of the following ways, with approval of the advisor: Project, University Thesis, or Comprehensive Examination.

A. Special Project (5 units)

- COMM 6899 - Project *Units: 5* (may be taken over two quarters, but must total 5 units to finish)

Prerequisites:

- COMM 6000 - Introduction to Graduate Study *Units: 4*
- COMM 6010 - Seminar in Theories in Communication *Units: 4*

- COMM 6020 - Seminar in Communication, Media, and Society *Units: 4*
- or
- COMM 6040 - Advanced Qualitative Research Methods *Units:*

B. University Thesis (9 units)

- COMM 6910 - University Thesis *Units: 1-9* (may be taken over two or more quarters, but must total 9 units to finish)

Prerequisites:

- COMM 6000 - Introduction to Graduate Study *Units: 4*
 - COMM 6010 - Seminar in Theories in Communication *Units: 4*
 - COMM 6020 - Seminar in Communication, Media, and Society *Units: 4*
- or
- COMM 6040 - Advanced Qualitative Research Methods *Units:*

C. Comprehensive Examination (1 unit)

- COMM 6901 - Comprehensive Examination Preparation *Units:*

Prerequisites:

Advancement to Candidacy (completion of all required and elective courses.)

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills requirement.

Computer Networks, M.S.

Program Description

The Department of Mathematics and Computer Science offers graduate study leading to the degree of Master of Science in Computer Networks. The program provides opportunities for students to gain a deeper understanding of the basis for computer networking technology and its application to communication infrastructures. It is designed to offer both a theoretical background and practical experience beyond that covered in typical undergraduate degree programs. A theoretical background to support hands-on learning is imperative as the computer network industry and its technologies are transitory and rapidly evolving. Students can expect to have a number of different job classifications during their working lives.

The area of computer networks requires a variety of skills including knowledge and experience with computer network protocols, routing algorithms, network congestion control, error handling, network management, data compression and encryption, switching algorithms, operating systems principles and practices, computer architecture, and software development. Computer network theory rests upon engineering principles and concepts that draw upon mathematics and physics.

Our program features small classes that allow for close contact between students and faculty. Many graduate classes are offered in the late afternoon or early evening, making it possible for working students to attend. Courses toward the M.S. degree may also be taken during the summer quarter. Students may begin their studies in any one of the four quarters.

Students interested in the M.S. degree program in Computer Networks should speak with the Computer Networks Graduate Coordinator.

Student Learning Outcomes

Students who graduate with a Master's degree in Computer Networks will be able to:

- Exhibit mastery of advanced computer science theory as applied to the field of computer networks.
- Employ current techniques, skills, tools, and coding practices necessary for application and system development.
- Apply critical thinking and problem solving skills by analyzing problems, designing solutions, and evaluating results.
- Demonstrate communication skills in both written and oral form, and work in a team environment.
- Independently acquire new computer related skills through analysis of current computer science literature and industrial practices.

Career Opportunities

- Network Engineer
- Software Engineer
- Network Administrator
- Network Applications Programmer
- Web/Multimedia Manager
- Webmaster
- Network Security Administrator
- Programming Team Member, possibly specializing in Design, Testing, or Documentation
- Computer Network Support
- Computer Sales Representative
- Customer Support
- Technical Writer
- Teacher/Professor

Faculty

The faculty of the Mathematics and Computer Science Department hold doctorates in a wide variety of areas. They have a strong commitment to high quality teaching, and have interests in fields such as wireless and mobile networking, network security, data compression, computer graphics, numerical analysis, compiler design, computer simulation, parallel programming, computer architecture, automata, multimedia, cryptography, computational complexity, language design and implementation, graph theory, microcomputer architecture, and database systems.

Features

There are multiple PC labs around campus as well as wireless network access. The department runs a grid computing laboratory and has classrooms equipped for computerized demonstration.

Scholarships

Each year the department awards several scholarships for the subsequent year. Scholarship applications may be obtained from the department office during the Spring quarter.

Admission

To apply for admission to the Master of Science program in Computer Networks, a student must submit the proper forms, fees and transcripts to the university's Office of the Registrar, which reviews each application initially. The department then reviews the application, making the decision whether to accept or reject the applicant. Each applicant must have their scores on the general portion of Graduate Record Examination (GRE) submitted directly to the department. Submission of scores on the Computer Science portion is optional.

A student wishing to enter this program typically has an undergraduate degree in Computer Science or in a related field, with courses in Computer Science as indicated below, and must have a grade point average of 2.75 in all undergraduate work and a 3.00 grade point average in the Computer Science Core and Mathematics courses listed below.

Computer Networks Admission Requirements

- CS 2430 - Computer Organization and Assembly Language Programming *Units: 4*
- CS 3240 - Data Structures and Algorithms *Units: 4*
- CS 3430 - Computer Architecture *Units: 4*
- CS 3590 - Data Communications and Networking *Units: 4*

- CS 4560 - Operating Systems *Units: 4*
- or*
- CS 3560 - Introduction to Systems Programming *Units: 4*

- CS 4590 - Computer Networks *Units: 4*

Successful completion of equivalents to all the following mathematics requirements is also required.

Mathematics Requirements for Admission

- MATH 2150 - Discrete Structures *Units: 4*

An upper division course in probability or statistics

- STAT 3601 - Statistics and Probability for Science and Engineering I *Units: 4*
- STAT 3401 - Introduction to Probability Theory I *Units: 4*
- STAT 3502 - Statistical Inference I *Units: 4*

A student who has not met all of the above course requirements may

A student who has not met all of the above course requirements may be admitted to the program at the discretion of the department as a "Conditionally Classified Graduate" student, provided the student's record clearly demonstrates the capability of meeting all these requirements.

No more than 20 quarter units taken while in "Conditionally Classified Graduate" status may be applied to the degree. Note that courses used to make up deficiencies for admission may not be applied toward the master's degree. A "Conditionally Classified Graduate" student who has no course deficiencies, a "B" or better average in at least 12 quarter units of post-baccalaureate study, and has satisfied the University Writing Skills Requirement should petition the graduate coordinator for admission to the master's degree program with "Classified Graduate" status. A maximum of 13 units taken as an "Unclassified Post-baccalaureate" student may be applied to a master's degree.

Advancement to Candidacy

Advancement to Candidacy is a university requirement for graduation for a master's degree program. A student with "Classified Graduate" status may apply for Advancement to Candidacy after completing at least 16 quarter units towards the master's degree with a "B" average, including at least two 6000 level Computer Science courses with a "B" or better average.

Before being Advanced to Candidacy, a student's complete course of study must be approved by the Computer Networks Graduate Committee.

Degree Requirements

The following departmental requirements are in addition to the university requirements.

A. Required Courses (12 units)

- CS 6560 - Operating Systems Design *Units: 4*
- CS 6580 - Distributed Systems *Units: 4*
- CS 6591 - Communication Network Analysis and Design *Units: 4*

B. Breadth Requirement (16 units)

Four courses selected from the following:

- CS 6320 - Software Engineering of Web-Based Systems *Units: 4*
- CS 6522 - Advanced WWW Software Development *Units: 4*
- CS 6525 - Network Security *Units: 4*
- CS 6526 - Security in Wireless, Mobile, Grid and Pervasive Computing *Units: 4*
- CS 6527 - Network Security Management *Units: 4*
- CS 6592 - Network Management *Units: 4*
- CS 6594 - Broadband and Multimedia Networks *Units: 4*

- CS 6596 - Wireless and Mobile Network Architecture *Units: 4*
- CS 6715 - Data Compression *Units: 4*

Note:

Some of the breadth requirement courses contain prerequisites that are not included in the program admission requirements.

C. Capstone Experience (5 units)

- CS 6899 - Project *Units: 5*

The capstone experience consists of a project, normally involving a team of students, and an individual formal document from each student. Projects must be approved by a designated faculty committee and sponsored by a faculty advisor.

D. Electives (12 units)

Any graduate course in Computer Science may be applied to this category. Any Computer Science course numbered 3000 (except CS 3898) or higher, provided it has not been already applied toward a B.S. degree or toward prerequisites for admission. This restriction includes equivalent courses from other degree programs; exceptions require the approval of the Computer Networks Graduate Committee.

E. Unit and Grade Requirements

At least 45 quarter units of approved upper division and graduate work. Of these, at least 26 units must be approved graduate (6000- level) courses. All work toward the 45 units must be at an average grade of "B" (3.0) or higher. Grades below "C-" will not be counted as prerequisites or toward the degree

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Computer Science, M.S.

Program Description

The Mathematics and Computer Science Department offers graduate study leading to the degree of Master of Science in Computer Science. This program is designed to extend the student's knowledge in a broad manner beyond the baccalaureate degree major in Computer Science. It will both (1) deepen general understanding of theoretical principles and (2) provide specific professional background. This approach is especially important in Computer Science, where training in specific languages and systems and on specific machines is transitory, as these languages, systems, and machines evolve. In contrast, many of the principles will last and generally apply to a wide variety of specializations within the field. This breadth is important to individual students because many of them will have a number of different job classifications in their working lives.

Our program features small classes that allow for close contact between students and faculty. Most graduate classes are offered in the late afternoon or early evening, making it possible for working students to attend. Some courses toward the M.S. degree may also be taken during the summer quarter. Students may begin their studies in any one of the four quarters.

Students interested in the M.S. degree program in Computer Science should speak with the Computer Science Graduate Coordinator. The Math and Computer Science Department also offers a Master of Science degree program in Computer Networks.

Student Learning Outcomes

Students graduating with an M.S. in Computer Science will be able to:

- apply advanced computer science theory to problems;
- demonstrate advanced understanding of the mechanisms, components and architecture of current computing systems;
- generate and process useful representations of knowledge;
- critique, plan and produce complex software applications, and
- research and analyze current computer science literature.

Career Opportunities

- Systems Analyst
- Program Analyst or Designer
- Systems Manager or Programmer
- Scientific Applications Programmer
- Computer Operations Manager
- Graphics Specialist
- Software Engineer
- Programming Team Member, possibly specializing in Design, Testing, or Documentation
- Computer Network Support
- Database Applications Programmer or Administrator
- Computer Sales Representative
- Customer Support
- Technical Writer
- Teacher/Professor

Faculty

The faculty of the Mathematics and Computer Science Department hold doctorates in a wide variety of areas. They have a strong commitment to high quality teaching, and have interests in fields such as computer graphics, networks, numerical analysis, compiler design, computer simulation, parallel programming, computer architecture, automata, multimedia, cryptography, computational complexity, language design and implementation, graph theory, microcomputer architecture, and database systems.

Features

Computer Science students at Cal State East Bay have access to some of the most modern and powerful computer equipment available. The campus provides a network backbone, including connection to the Internet, personal computers, and wireless network access. Several computer labs on campus offer terminal access and assistance with problems.

Cal State has an active Computing Club, which hosts industry tours as well as academic and social events and is involved with a number of ongoing projects.

Scholarships

Each year the department awards a number of scholarships covering a large portion of the fees for the subsequent year. Scholarship applications may be obtained from the department office during the Winter quarter.

Admission

To apply for admission to the Master of Science program in Computer Science, a student must submit the proper forms, fees and transcripts to the university's Office of Admissions, which reviews each application initially. Each applicant must have their scores on the general portion of the Graduate Record Examination (GRE) submitted directly to the department. The department then reviews the application, making the decision whether to accept or reject the applicant.

A student wishing to enter this program must normally have an undergraduate degree in Computer Science or in a related field, with courses in Computer Science as indicated below, and must have a grade point average of 2.75 in all undergraduate work and a 3.00 grade point average in the Computer Science Core and Mathematics courses listed below.

Computer Science Admission Requirements

Twenty-eight (28) quarter units (7 courses) of upper division Computer Science coursework that covers a broad range of Computer Science and includes the following four courses or their equivalents.

- CS 3120 - Programming Language Concepts *Units: 4*
- CS 3240 - Data Structures and Algorithms *Units: 4*
- CS 3430 - Computer Architecture *Units: 4*
- CS 4560 - Operating Systems *Units: 4*

Successful completion of equivalents to all the following mathematics requirements is also required.

Mathematics Requirements for Admission

- MATH 2101 - Elements of Linear Algebra *Units: 4*
- MATH 2150 - Discrete Structures *Units: 4*

A year of Calculus

- MATH 1304 - Calculus I *Units: 4*
- MATH 1305 - Calculus II *Units: 4*
- MATH 2304 - Calculus III *Units: 4*

An upper division course in Probability or Statistics

- STAT 3401 - Introduction to Probability Theory I *Units: 4*
- STAT 3502 - Statistical Inference I *Units: 4*
- STAT 3601 - Statistics and Probability for Science and Engineering I *Units: 4*

A student who has not met all of the above requirements may

A student who has not met all of the above requirements may be admitted to the program at the discretion of the department as a "Conditionally Classified Graduate" student, provided the student's record clearly demonstrates the capability of meeting all these requirements.

No more than 20 quarter units taken while in "Conditionally Classified Graduate" status may be applied to the degree. Note that courses used to make up deficiencies for admission may not be applied toward the master's degree. A "Conditionally Classified Graduate" student who has no course deficiencies, a "B" or better average in at least 12 quarter units of post-baccalaureate study, and has satisfied the University Writing Skills requirement should petition the graduate coordinator for admission to the master's degree program with "Classified Graduate" status. A maximum of 13 units taken as an "Unclassified Post-baccalaureate" student may be applied to a master's degree.

Advancement to Candidacy

Advancement to Candidacy is a university requirement for graduation from a master's degree program. A student with "Classified Graduate" status may apply for Advancement to Candidacy after completing at least 16 quarter units towards the master's degree with a "B" average, including at least two 6000 level Computer Science courses with a "B" or better average.

Before Advancement to Candidacy, a student's complete course of study must be approved by the Computer Science Graduate Coordinator.

Degree Requirements

The following departmental requirements are in addition to the university requirements.

A. Required Courses (10 units)

- CS 6000 - Research Methodologies *Units: 2*
- CS 6260 - Computation and Complexity *Units: 4*
- CS 6560 - Operating Systems Design *Units: 4*

B. Breadth Requirement (16 units)

Two courses from each of the following two categories (16 units)

Development/Theory (8 units)

- CS 6170 - Automata and Formal Languages *Units: 4*
 - CS 6310 - Advanced Software Engineering *Units: 4*
 - CS 6320 - Software Engineering of Web-Based Systems *Units: 4*
 - CS 6520 - Cryptography and Data Security *Units: 4*
 - CS 6522 - Advanced WWW Software Development *Units: 4*
 - CS 6715 - Data Compression *Units: 4*
 - CS 6810 - Topics in Artificial Intelligence *Units: 4*
 - CS 6820 - Machine Learning *Units: 4*
 - CS 6870 - Computer Simulation *Units: 4*
- MATH 6750 - Topics in Advanced Numerical Analysis *Units: 4*
or
• CS 6750 - Topics in Numerical Analysis *Units: 4*

Systems/Architecture (8)

- CS 6110 - Theory and Design of Compilers *Units: 4*
- CS 6432 - VLSI Systems Design *Units: 4*
- CS 6525 - Network Security *Units: 4*
- CS 6570 - Distributed Computation *Units: 4*
- CS 6580 - Distributed Systems *Units: 4*
- CS 6660 - Database Systems *Units: 4*
- CS 6752 - Digital Signal Processing *Units: 4*
- CS 6825 - Computer Vision *Units: 4*

C. Capstone Experience (1-5 units)

A student must select and satisfy one of the following capstone requirements:

1. Capstone Experience

- CS 6901 - Graduate Synthesis in Computer Science *Units: 4*

A student must successfully complete at least 30 units of study including all required courses

A student must successfully complete at least 30 units of study including all required courses, satisfy the WST requirement, and be in good standing before enrolling in Capstone Experience.

- CS 6000 - Research Methodologies *Units: 2*
- CS 6260 - Computation and Complexity *Units: 4*
- CS 6560 - Operating Systems Design *Units: 4*

2. Departmental Thesis

Students who write a thesis must have an advisor who agrees to oversee the work, and must have the proposed topic approved by the Computer Science Graduate Studies Committee.

- CS 6909 - Departmental Thesis *Units: 1-5*

D. Electives (14-18 units)

The following courses (or their equivalents) may be counted toward the master's degree:

- Any graduate course in Computer Science (except CS 6899) may be applied to this category.
- Any Computer Science course numbered 3000 (except CS 3898) or higher, provided it has not been already applied toward a B.S. degree or toward prerequisites for admission. This restriction includes equivalent courses from other degree programs; exceptions require the approval of the Computer Science Graduate Committee.
- MATH 3151 - Combinatorics *Units: 4*
- MATH 4151 - Graph Theory *Units: 4*

E. Courses equivalent to

if not completed before admission to the M.S. program.

- CS 4170 - Theory of Automata *Units: 4*
- or*
- CS 6170 - Automata and Formal Languages *Units: 4*
 - CS 4245 - Analysis of Algorithms *Units: 4*

F. Unit and Grade Requirements

At least 45 quarter units of approved upper division and graduate work. Of these, at least 26 units must be approved graduate (6000- level) courses. All work toward the 45 units must be at an average grade of "B" (3.0) or higher. Grades below "C-" will not be counted as prerequisites or toward the degree.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Construction Management, M.S.

Program Description

The Department of Engineering is offering an interdisciplinary Masters of Science degree in Construction Management. This degree is designed for working professionals who are in leadership/management positions in the construction industry or planning to advance their careers to manage large construction projects.

The goals of the Masters of Science degree in Construction Management are to prepare effective managers for large public and private construction projects, to prepare the workforce required for the state's transportation infrastructure improvements, and to enable current and future engineers and other professionals to assume leadership roles in the construction industry.

This program is different from other construction management programs as it is based on a well-balanced curriculum covering various aspects of the construction management profession. Special attention is given to working professionals with classes offered at times convenient for the students. Students will take required courses in legal and environmental issues in construction, project planning and control, cost estimating, financial and risk management issues. Also issues in construction safety and current trends in construction industry will be discussed. Students will also have a broad choice of electives from courses in construction management, engineering, business, or other graduate courses with department approval.

Mission Statement

The mission of the Masters of Science degree in Construction Management is to prepare effective managers to lead medium and large public and private construction projects, prepare a technically capable management workforce requirement for the state's transportation infrastructure improvement projects, and enable current and future engineers and other professionals to assume leadership roles in the construction industry.

Student Learning Outcomes

Students graduating with an M.S. in Construction Management from Cal State East Bay will be able to:

- have knowledge in the core construction management areas (legal issues in construction, environmental issues, project planning and control, financial decision making, risk analysis, and safety),
- have knowledge in broad areas of construction management beyond the core areas,
- communicate effectively,
- function in teams,
- have the knowledge of sustainable building and construction techniques and relevant state regulations,
- have an awareness of the complex environment (involving professional and ethical responsibilities) in which they will practice their profession,
- have the ability to educate themselves and be prepared for lifelong learning and professional development, and
- have experience in solving real life problems.

Career Opportunities

With the expected increase in large construction work, in part stemming from the increase in public spending on California's transportation infrastructure improvement, there is considerable demand for individuals who can technically and scientifically manage large construction projects. The construction industry, as a whole, is one of the largest industries in the nation with a great need for skilled project managers. Sample jobs are construction manager, site manager and others.

Features

The M.S. in Construction Management is designed to accommodate working adults. The class meetings will be conducted at times convenient for the students. Most of the faculty and instructors have significant construction management work experience. Students will have the opportunity to take elective courses in construction management, engineering, business, or other graduate courses with department approval, to broaden their skills.

Admission

The M.S. in Construction Management is open to individuals planning a career or advancing their career in the construction industry, and who have

- a baccalaureate degree from an accredited university with a minimum overall GPA of 2.5 (4.0 basis) in their undergraduate work,
- relevant work experience, and
- College Algebra and Trigonometry or equivalent level math courses.

In addition to the University Graduate and Post-baccalaureate Application, all applicants should submit to the department:

- personal statement explaining their reasons for wanting to pursue the M.S. in Construction Management degree,
- a resume detailing their professional and academic achievements, and
- two letters of recommendation.

Admission to the University and admission to the M.S. in Construction Management degree program are separate steps.

Student Standing and Progress Toward the Degree

There are three categories of student status which reflect student progress toward the degree: "Conditionally Classified Graduate" student, "Classified Graduate" student, and "Advancement to Candidacy" student.

- Students achieve "Conditionally Classified Graduate" status when they have been admitted to the M.S. in Construction Management degree program, but have not yet completed the prerequisites for "Classified Graduate" status in the M.S. in Construction Management.
- Students achieve "Classified Graduate" status when they have satisfied the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.
- Students are advanced to Candidacy when they have completed the required courses with a 3.0 or better GPA.

Note: Students who fail to maintain progress by falling below a 3.0 GPA in their graduate courses for two or more consecutive quarters will be academically disqualified from the university.

Degree Requirements

The M.S. degree program in Construction Management requires completion of 48 quarter units distributed among required courses, elective courses, and the Project. Of these units, at least 35 units must be completed in residence (transfer units are limited to 13 quarter units); at least 24 units must be in courses in the 6000 series. No course numbered 1000 to 2999 (or equivalent if taken elsewhere) may be used as part of the 48-unit graduate degree program.

No more than 4 units of Independent Study (CMGT 6900) may be counted toward the 48 units required for the degree. Project credit may not exceed 4 units.

A grade point average of 3.0 must be maintained in all 48-quarter units taken to satisfy the degree requirements. All graduate degree requirements must be completed within five (5) years.

Sample Program

A Sample Program for this degree can be found at the department website: www20.csueastbay.edu/csci/departments/engineering/.

Curricular Requirements (48 units)

I. Required Courses (36 units)

- CMGT 6100 - Engineering Graphics for Construction Management *Units: 4*
- CMGT 6200 - Legal Issues in Construction Management *Units: 4*
- CMGT 6300 - Environmental Issues and Green Building *Units: 4*
- CMGT 6400 - Construction Cost Estimating *Units: 4*
- CMGT 6500 - Construction Project Planning and Control, Computer Tools *Units: 4*
- CMGT 6600 - Financial Decision Making and Reporting in Construction *Units: 4*
- CMGT 6700 - Construction Risk Management and Commissioning *Units: 4*
- CMGT 6800 - Construction Safety *Units: 4*
- CMGT 6850 - Current Issues in Construction Management *Units: 4*

II. Elective Courses (8 units)

Eight (8) quarter units of graduate course credit from the following list or other graduate courses with department approval.

- CMGT 6860 - Utility Systems Construction *Units: 4*
- CMGT 6870 - Advanced Integrated Computer Applications *Units: 4*

- CMGT 6900 - Independent Study *Units: 1-4*
- ENGR 5601 - Introductory Statistics and Probability for Science and Engineering *Units: 4*
- ENGR 6200 - Project Management *Units: 4*
- and
- ENGR 6400 - Research Methods in Engineering Management *Units: 4*
- MGMT 6130 - Enterprise Planning and Control *Units: 4*
- MGMT 6526 - Quality Management *Units: 4*
- and
- MGMT 7810 - Quality Management *Units: 4*

III. Capstone Experience (4 units)

- CMGT 6899 - Project *Units: 1-4* or pass the comprehensive examination and complete an additional 4-unit elective course with departmental approval.

Incompletes

Students accumulating more than 8 units of work graded "I" may not register for courses applicable to the degree until the "I" grades are removed.

Capstone Experience

To complete a research project, students enroll in CMGT 6899 - Project (4 units). The Project is a capstone cumulative experience based on the coursework completed for the degree and is accompanied by a written document. A faculty member from the department supervises the student's work. One bound copy of the written component of the Project is required for the department.

Grades of "RP" (Report in Progress) may be given for a Project that is not completed at the end of the quarter. The "RP" grade must be removed within one year or it will become an "F."

Granting the Degree

Upon satisfaction of all requirements for the degree, the department will recommend that the candidate be granted the Master of Science degree in Construction Management. Students must file for graduation by the end of the second week of the quarter prior to the quarter in which they expect to graduate.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Counseling, Clinical Child/School Psychology Option, M.S.

Program Description

There are three options within the M.S. degree in Counseling. These are designed to ensure the most thorough preparation for the profession and its subspecialties, as well as to provide the student a broad experience with points of view and philosophy in both theory and practice. The faculty is committed to the intellectual and social-emotional growth of the student as well as his or her professional preparation.

For administrative purposes, faculty and students are organized into three options, all of which lead to the M.S. in Counseling. Potential applicants are invited to seek appointments with faculty representatives of the three options to discuss their interests and philosophical orientations.

Licenses Related to Counseling Programs

The department does not issue licenses but does offer courses which are designed to meet the educational requirements of two State of California licenses. All licenses require additional experience beyond degrees, as well as written and oral exams administered by the appropriate board of the State of California.

Marriage and Family Therapy License

The M.S. Counseling degree has an option designed to meet the requirements of Sections 4980.37, 4980.40 and subdivisions (a) and (d) of Section 4980.41, Article 1 (Regulation: Chapter 13, Marriage, Family Therapy, of the Business and Professions Code, State of California). Students are advised to acquire and read the laws governing MFT licensure from the Board of Behavioral Sciences in Sacramento.

See your program advisor in the Educational Psychology department for the procedures required for application for this license. State documents must be requested by the applicant from the Board of Behavioral Science Examiners, 400 R Street, Sacramento, CA 95814-6240.

Grades: If a candidate for the university recommendation for MFT licensure has more than one "C" grade among the courses listed on the Board of Behavioral Sciences approval form, that form cannot be approved by the Designee of the Chief Academic Officer of Cal State East Bay.

Field Work Credit: Field work or internship courses represent the student's efforts and growth in the interpersonal skills basic to marriage, family, and child counseling. A student who receives a grade of "NC" (no credit) for one quarter is on probation regarding continuation in the MFT approval track. A second grade of "NC" will disqualify the student for continuation in the MFT option and ultimate university recommendation for the license. Further, candidates may be disqualified from this program for actions judged by the faculty to reflect unethical, unprofessional, or incompetent behavior or interpersonal skills.

Educational Psychology License

The Educational Psychology license is issued by the Board of Behavioral Sciences. A credential in School Psychology and three years of related experience are currently required.

Licensed Professional Clinical Counselor License

Students who earn the MS in Counseling are eligible for the Licensed Professional Clinical Counselor License, which is awarded by the California Board of Behavioral Science (BBS).

Requirements for M.S. in Counseling (72 units)

The M.S. degree in Counseling requires 72 units organized according to university requirements (see the Graduate/Post-Baccalaureate Admission and Degree Information chapter in this catalog). Requirements are established to ensure that each degree candidate obtains adequate breadth in subject matter, field experiences, and research.

I. Prerequisites (15 units minimum; not counted toward 72-unit total)

A baccalaureate degree with a major in psychology or in child or human development plus a statistics course. For applicants with baccalaureates in other majors, the following courses are required and will provide adequate background for a counseling graduate program:

- An introductory course in descriptive statistics (3 units)
- A course in abnormal or pathological behavior (3 units)
- A course in learning (3 units)
- A course in developmental psychology or human or child development (3 units)
- A course in personality theory or development (3 units)

II. Requirements (40-49 units)

A. Competency Area Requirements (31 units)

Students are required to demonstrate competency in the areas listed below. With the Dean's approval, students may substitute alternative related courses.

1. Basic theoretical and research knowledge of systems of counseling and psychotherapy (4 units)

- EPSY 6750 - Foundations of Counseling *Units: 4*

2. Knowledge of psychological, biological, and social development over the lifespan and related psycho-therapeutic interventions (4 units)

- EPSY 6302 - Individual Development *Units: 4*

3. Knowledge of group counseling and psychotherapy, consultation, systems analysis and change agents in organizations (4 units)

- EPSY 6762 - Group Procedures and Facilitation *Units: 4*

4. Knowledge of theory and procedures for collecting and evaluating clinical assessment data (4 units)

- EPSY 6701 - Appraisal Procedures: Standardized *Units: 4*
or
- EPSY 6720 - Theory and Assessment of Cognition *Units: 4*

5. Cultural perspectives in counseling: (4 units)

acquiring understanding of, and sensitivity to, individuals from diverse backgrounds and the interpersonal skills to work with them. Included are social class, ethnic, racial, sexual, and lifestyle differences

- EPSY 6752 - Cross-Cultural Counseling *Units: 4*

6. Ability to conduct and interpret research (4 units)

- EPSY 6023 - Research in Applied Behavioral Sciences *Units: 4*

7. Laws and ethical principles as they apply to the practice of professional counseling (3 units)

- EPSY 6785 - Law and Ethics in Counseling *Units: 3*

8. Community mental health theories and skills (4)

- EPSY 6775 - Community Mental Health Counseling *Units: 4*

B. Fieldwork Requirement (9 units)

A minimum of three quarters of fieldwork is required in the application of counseling procedures and assessment techniques in fieldwork settings.

- EPSY 6670 - Field Work Group Supervision I *Units: 3*
- EPSY 6671 - Field Work Group Supervision II *Units: 3*
- EPSY 6672 - Field Work Group Supervision III *Units: 3*

C. Capstone Experience (0-9 units)

Students must successfully complete either a University Thesis, a Departmental Thesis, a Project, or a Comprehensive Examination, and should select option (1), (2), (3), or (4).

Option 1.

- EPSY 6899 - Project *Units: 2-5* ¹
- or*
- EPSY 6021 - Thesis-Project Seminar (Mild-Moderate Disabilities Option) *Units: 3*

Option 2.

- EPSY 6909 - Departmental Thesis *Units: 2-5*
- or*
- EPSY 6021 - Thesis-Project Seminar (Mild-Moderate Disabilities Option) *Units: 3* ¹

Option 3.

- EPSY 6910 - University Thesis *Units: 1-9* ²
- or*
- EPSY 6021 - Thesis-Project Seminar (Mild-Moderate Disabilities Option) *Units: 3*

Option 4.

Comprehensive Examination *Units: 0*

Note:

- Students completing a Project or a Departmental Thesis and registering for EPSY 6899 or EPSY 6909, even if combined with EPSY 6021, are limited to a total of 5 units. EPSY 6021 can be repeated for a total of 6 units; however, only five of these six units may be applied to the M.S. degree for students doing a Project or Departmental Thesis
- Students completing a University Thesis may enroll in EPSY 6021 for up to 6 units.

III. Options (19-22 units)

Option Requirements listed below.

IV. Electives (1-20 units)

Elective courses to be determined by advisor/coordinator. Total number of elective units for the masters depend on the degree option.

Note:

Additional course work, beyond that required for the masters, may be required for professional licensure and/or credentials.

Other courses recommended as electives:

- ANTH 3745 - Human Sexuality: Anthropological Perspectives *Units: 4*
- COMM 4830 - Intercultural Communication *Units: 4*
- EPSY 5021 - Introduction to Educating all Students in Diverse Classrooms *Units: 4*
- EPSY 5610 - Microcounseling I *Units: 2*
- EPSY 5620 - Microcounseling II *Units: 2*
- EPSY 6025 - Psychopathology of Childhood *Units: 4*
- EPSY 6029 - Seminar in Chemical Dependency *Units: 2*
- EPSY 6131 - Assessments: Students with Mild-Moderate Disabilities *Units: 4*

- EPSY 6301 - Pediatric Psychology *Units: 4*
- EPSY 6400 - Family Psychotherapy *Units: 4*
- EPSY 6403 - Psychotherapy for Children *Units: 4*
- EPSY 6402 - Couples Therapy *Units: 4*
- EPSY 6406 - Seminar in Human Sexuality *Units: 2*
- EPSY 6500 - Cognitive Behavior Therapy *Units: 4*
- EPSY 6610 - Graduate Seminar I *Units: 2*
- EPSY 6620 - Graduate Seminar II *Units: 2*
- EPSY 6630 - Graduate Seminar III *Units: 2*
- EPSY 6746 - Neuropsychology of Learning Disabilities *Units: 4*
- EPSY 6751 - Counseling and Psychotherapy Theory *Units: 4*
- EPSY 6754 - Cross-Cultural Consultation *Units: 4*
- EPSY 6764 - Intervention Strategies for Systems and Organizational Change *Units: 4*
- EPSY 6770 - Internship *Units: 2-6*
- EPSY 6783 - Seminar: Contemporary Issues *Units: 2-3*
- EPSY 6786 - Child Abuse Assessment *Units: 1*
- EPSY 6810 - Advanced Graduate Seminar I *Units: 2*
- EPSY 6820 - Advanced Graduate Seminar II *Units: 2*
- EPSY 6830 - Advanced Graduate Seminar III *Units: 2*
- EPSY 6860 - Advanced Fieldwork I *Units: 2-4*
- EPSY 6870 - Advanced Field Work Group Supervision I *Units: 3*
- EPSY 6871 - Advanced Field Work Group Supervision II *Units: 3*
- EPSY 6872 - Advanced Field Work Group Supervision III *Units: 3*
- EPSY 6880 - Advanced Internship *Units: 2-15*
- ES 3105 - African American Identity *Units: 4*
- ES 3310 - God is Red: American Indian World View *Units: 4*
- ES 4290 - Latino Politics and Public Policy *Units: 4*
- HDEV 3800 - Human Development and Interaction *Units: 4*
- HDEV 4004 - Current Issues in Aging *Units: 4*
- HDEV 4325 - Lesbian and Gay Lifespan Development *Units: 4*
- HDEV 4350 - Intimate Relationships Throughout the Life Span *Units: 4*
- HDEV 4440 - Lesbian and Gay Lifespan Development *Units: 4*
- PSYC 3420 - Stress and Coping *Units: 4*
- PSYC 3520 - Interpersonal Processes *Units: 4*
- PSYC 3540 - Groups and Organizations *Units: 4*
- PSYC 4300 - Motivation *Units: 4*
- PSYC 4320 - Physiological Psychology *Units: 4*
- PSYC 4360 - Psychopharmacology *Units: 4*
- SOC 3410 - Sociology of the Family *Units: 4*
- SOC 3411 - Sociology of Gender *Units: 4*
- SOC 3750 - Alcohol and Drug Abuse *Units: 4*
- SPPA 6060 - Advanced Study of Language Disorders in Children *Units: 4*

Note:

Public Administration courses may be used as electives by students completing the combined program with Public Administration.

Clinical Child/School Psychology Option (19 units)

For additional specific program requirements please see Pupil Personnel Credential: School Psychology Internship and School Psychology Specialization

- EPSY 6403 - Psychotherapy for Children *Units: 4*
- EPSY 6500 - Cognitive Behavior Therapy *Units: 4*
- EPSY 6669 - Seminar in Mental Health Consultation *Units: 3*
- EPSY 6911 - Developmental Assessment Practicum *Units: 4*

- EPSY 6912 - Personality Assessment *Units: 4*

Counseling Programs of Study

Clinical Child/School Psychology Program

Includes:

Clinical Child/School Psychology Option

Marriage and Family Therapy Option

School Psychology Credential

Faculty: John M. Davis, Greg Jennings (Coordinator), Rolla E. Lewis, Janet Logan, Oanh Tran

The Clinical Child/School Psychology (CCSP) program at CSUEB is committed to a training philosophy that promotes the educational and social-emotional development of children, youth, and families. It is considered essential that each student develop sound professional values along with the acquisition of professional knowledge. An ecological human development perspective and collaborative consultation skills are emphasized, with the understanding that the ability to work collaboratively with families, teachers, and communities is critical to helping children succeed. As a fundamental principle of ethical practice, assessment, consultation, and intervention skills are inextricably linked throughout the curriculum. Program development and evaluation skills are also emphasized in order to ensure that graduates are well prepared to promote effective system-level intervention programs for meeting the needs of children, schools, families, and communities.

Multicultural issues are addressed as an integral and essential component of every course the department offers. It is the mission of the department, College of Education and Allied Studies, and university to prepare leaders for a diverse society. It is also the explicit goal of the Clinical Child/School Psychology program to prepare students to work effectively with children and families across the full spectrum of culture, ethnicity, and individual differences. The program is also developing training experiences that emphasize the development of skills in cultural competency.

The Clinical Child/School Psychology program provides the only course of study in the department leading to the School Psychology credential. This program also offers the academic and minimum fieldwork requirements for the Marriage and Family Therapy license and the Educational Psychology license.

The candidate for a credential must demonstrate an increasing ability to establish constructive interpersonal relationships with persons of differing ages, cultures, and experiential backgrounds (including children who may have endured severe physical or emotional trauma) in a manner that promotes confidence, mental health, social adjustment, and learning. The candidate must demonstrate increasing ability to establish satisfactory working relationships with parents, teachers, school personnel, and other community members involved in a particular case. The candidate must also demonstrate increasing ability to apply professional methods and techniques at proficiency levels significantly higher than those generally required in academic coursework.

To ensure that candidates have opportunity to develop the skills necessary for credential eligibility, specific credential competencies have been integrated into all courses required for a credential. In order to demonstrate at least minimal competencies in the required skills, therefore, the credential candidate must earn a grade of "B" or higher in each of these courses. In the event that a candidate does not achieve the criterion of "B" work in a required course, (s)he must consult immediately with the faculty, to determine a plan that will provide opportunity for remediation. Any candidate who receives a grade of "C" or lower in a required course will be classified automatically as probationary in the credential program; a second grade of "C" or lower will be considered sufficient basis for disqualification from the credential program and the related Master of Counseling degree program. Students are expected to have completed all prerequisites before entering the program. Candidates must take all courses that are required by the program, degree, and credential at California State University, East Bay.

Fieldwork and practical experiences, as evaluated by faculty and field supervisors, must also reflect a candidate's ability to meet the competencies specified in the program documents. Professional and interpersonal skills are the primary determinants of success in these settings. Any candidate who receives a grade of "NC" (No Credit) in a required fieldwork or internship course will be classified automatically as probationary in both the credential program and the Master of Counseling degree program. A meeting with the Coordinator of the School Psychology program will be required before additional registration in fieldwork or internship courses will be considered valid for credit toward a credential. A second grade of "NC" will be considered sufficient basis for disqualification from the credential program and the Master of Counseling degree program.

The program supports the development of the professional maturity of all candidates. The CCSP faculty evaluates candidates' professional and interpersonal maturity throughout the program. Only students who have demonstrated a high level of professional and personal integrity consistent with the role of the school psychologist will be recommended for the Pupil Personnel Services Credential in School Psychology upon completion of coursework, fieldwork, internship and Praxis exam results.

Candidates who fail to demonstrate professional and personal responsibility (as evidenced by violations of professional, interpersonal trust, or ethical practice) are subject to termination from the CCSP Program.

Candidates are to apply for their credential upon graduation. After graduation a recommendation for the credential will be based on the University currency limitation of 5 years and determined by the currency of the required course work, fieldwork experience, and portfolio.

Marriage and Family Therapy Program

Marriage and Family Therapy Option

Faculty: Randi Cowdery (Coordinator), Terry Soo-Hoo

The faculty supervising this program are committed to training psychotherapists and mental health specialists for a variety of settings, such as private practice, social service agencies, schools, universities, hospitals, businesses, and industry.

Students admitted to this program of study will focus on the M.S. in Counseling with the option in Marriage and Family Therapy. The main focus of this program is on training psychotherapists who eventually plan to obtain a California license to practice marriage and family therapy. The program provides a course of study leading toward completion of the academic requirements and the 150 hours clinical experience required for application for the MFT license.

Graduates have been hired to work with clients in a wide range of agencies and businesses. Some are counselors in junior colleges and college counseling centers. Others are drug and alcohol abuse counselors in hospitals, family therapists-on-site in schools, advocates for the mentally ill, child therapists in therapeutic nursery schools, assessment counselors, information and referral clinicians in employee assistance programs, individual and family therapists for police departments, organizational development specialists, and human resource professionals in business and industry.

Some graduates have pursued doctoral-level work in clinical and counseling psychology or education after completing their master's degree in this program. Over the years, students have been accepted to programs in many universities, including the University of Missouri, the University of California at Berkeley, Michigan State University, Stanford University, California School of Professional Psychology, the Wright Institute, the University of Florida, the University of Texas, and the University of Wisconsin.

Students are trained for clinical work with individuals who are struggling with normal life problems, as well as individuals with more extensive psychopathology. Coursework covering various theories of individual, child, couple and family therapy prepares students well for advanced post-graduate internship work in clinical specializations of their choice. Students, as part of their clinical skills development, are also trained to lead counseling groups of children or adults.

Students take both evening and day classes. The program, however, cannot be completed entirely through evening classes. Groups of students are admitted annually.

The Marriage and Family Therapy program is designed to encourage growth and development of the students enrolled. Expansion of students' awareness and perspectives is emphasized. The faculty are licensed as marriage and family therapists or as psychologists. They are involved in clinical practices and are committed to preparing psychotherapists and consultants.

School Counseling, and Marriage and Family Therapy Program

Includes:

Marriage and Family Therapy Option

School Counseling Credential

Faculty: John M. Davis, Greg Jennings, Rolla E. Lewis (Coordinator), Janet Logan, Oanh Tran

Students enrolled in this program complete the M.S. in Counseling with a focus on both School Counseling and Marriage and Family Therapy (MFT). They are prepared to participate in, and to provide leadership for, a highly collaborative, prevention-based model for service delivery in the 21st century. This model involves the weaving together of educational services with community health, mental health, and other social services, as well as a strong focus on family issues and school-based/linked services.

The School Counseling and MFT program is a two-year course of study that leads to the Pupil Personnel Services (PPS) School Counseling Credential and meets the academic requirements, as well as the minimum 150 hours of experience required for the MFT license. Students enroll in a full-time course load each quarter (fall, winter, and spring) for two academic years. Courses are offered during the day, in the evening, and on weekends. The trainees participate in fieldwork at least 1 1/2 to 2 days per week (approximately 12-15 hours/week) each year, for a total of 600 hours.

Coursework and fieldwork experiences emphasize the development of the student's ability to provide comprehensive developmental school counseling programs meeting national and state standards. Students acquire the skills to develop classroom and small group guidance curriculum. They also learn to conduct individual and group therapy, guidance counseling, consultation, and to provide leadership in the creation and evaluation of integrated, comprehensive prevention and intervention programs. In the fieldwork experience, trainees have specific assigned activities and supervised experiences related to the California Credentialing Standards for the PPS School Counseling Credential, and to the MFT licensing qualifications of the Board of Behavioral Sciences.

To be admitted to the program, students must complete five departmental prerequisites with a grade of "B" or higher (see prerequisites listed under "Core Requirements for M.S. in Counseling" earlier in this chapter. In addition, applicants must have taken the GRE or MA and CBEST exams prior to entering the program.

The department is committed to interdisciplinary training and the delivery of prevention, family-centered, school-based/linked mental health services. Students enrolled in this program, therefore, take many of their basic courses with faculty and students who are enrolled in other specialist programs such as marriage and family therapy, school psychology, and special education. The candidate must satisfy all credential competency requirements as defined in the approved credential documents. Specifically, the candidate must achieve a grade of "B" or higher in the required courses. If a grade of "B" or higher is not earned, the candidate must immediately consult with the faculty to determine the academic work necessary to achieve competency level. (The original grade will not be changed, however.) Two grades of "C" or lower in required courses are sufficient basis for disqualification from the program (as stated in the University Catalog). Candidates must also successfully complete 600 hours of fieldwork in schools, pass the Professional School Counselor PRAXIS exam (0421) with a minimum score determined by the department, and pass the CBEST exam in order to be eligible for the PPS School Counseling Credential.

Candidates are to apply for their credential upon graduation. After graduation a recommendation for the credential will be based on the University currency limitation of 5 years and determined by the currency of the required course work, fieldwork experience, and portfolio.

Counseling, Marriage and Family Therapy Option, M.S.

Program Description

There are three options within the M.S. degree in Counseling. These are designed to ensure the most thorough preparation for the profession and its subspecialties, as well as to provide the student a broad experience with points of view and philosophy in both theory and practice. The faculty is committed to the intellectual and social-emotional growth of the student as well as his or her professional preparation.

For administrative purposes, faculty and students are organized into three options, all of which lead to the M.S. in Counseling. Potential applicants are invited to seek appointments with faculty representatives of the three options to discuss their interests and philosophical orientations.

Licenses Related to Counseling Programs

The department does not issue licenses but does offer courses which are designed to meet the educational requirements of two State of California licenses. All licenses require additional experience beyond degrees, as well as written and oral exams administered by the appropriate board of the State of California.

Marriage and Family Therapy License

The M.S. Counseling degree has an option designed to meet the requirements of Sections 4980.37, 4980.40 and subdivisions (a) and (d) of Section 4980.41, Article 1 (Regulation: Chapter 13, Marriage, Family Therapy, of the Business and Professions Code, State of California). Students are advised to acquire and read the laws governing MFT licensure from the Board of Behavioral Sciences in Sacramento.

See your program advisor in the Educational Psychology department for the procedures required for application for this license. State documents must be requested by the applicant from the Board of Behavioral Science Examiners, 400 R Street, Sacramento, CA 95814-6240.

Grades: If a candidate for the university recommendation for MFT licensure has more than one "C" grade among the courses listed on the Board of Behavioral Sciences approval form, that form cannot be approved by the Designee of the Chief Academic Officer of Cal State East Bay.

Field Work Credit: Field work or internship courses represent the student's efforts and growth in the interpersonal skills basic to marriage, family, and child counseling. A student who receives a grade of "NC" (no credit) for one quarter is on probation regarding continuation in the MFT approval track. A second grade of "NC" will disqualify the student for continuation in the MFT option and ultimate university recommendation for the license. Further, candidates may be disqualified from this program for actions judged by the faculty to reflect unethical, unprofessional, or incompetent behavior or interpersonal skills.

Educational Psychology License

The Educational Psychology license is issued by the Board of Behavioral Sciences. A credential in School Psychology and three years of related experience are currently required.

Licensed Professional Clinical Counselor License

Students who earn the MS in Counseling are eligible for the Licensed Professional Clinical Counselor License, which is awarded by the California Board of Behavioral Science (BBS).

Requirements for M.S. in Counseling (72 units)

The M.S. degree in Counseling requires 72 units organized according to university requirements (see the Graduate/Post-Baccalaureate Admission and Degree Information chapter in this catalog). Requirements are established to ensure that each degree candidate obtains adequate breadth in subject matter, field experiences, and research.

I. Prerequisites (15 units minimum; not counted toward 72-unit total)

A baccalaureate degree with a major in psychology or in child or human development plus a statistics course. For applicants with baccalaureates in other majors, the following courses are required and will provide adequate background for a counseling graduate program:

- An introductory course in descriptive statistics (3 units)
- A course in abnormal or pathological behavior (3 units)
- A course in learning (3 units)
- A course in developmental psychology or human or child development (3 units)
- A course in personality theory or development (3 units)

II. Requirements (40-49 units)

A. Competency Area Requirements (31 units)

Students are required to demonstrate competency in the areas listed below. With the Dean's approval, students may substitute alternative related courses.

1. Basic theoretical and research knowledge of systems of counseling and psychotherapy (4 units)

- EPSY 6750 - Foundations of Counseling *Units: 4*

2. Knowledge of psychological, biological, and social development over the lifespan and related psycho-therapeutic interventions (4 units)

- EPSY 6302 - Individual Development *Units: 4*

3. Knowledge of group counseling and psychotherapy, consultation, systems analysis and change agents in organizations (4 units)

- EPSY 6762 - Group Procedures and Facilitation *Units: 4*

4. Knowledge of theory and procedures for collecting and evaluating clinical assessment data (4 units)

- EPSY 6701 - Appraisal Procedures: Standardized *Units: 4*
- or*
- EPSY 6720 - Theory and Assessment of Cognition *Units: 4*

5. Cultural perspectives in counseling: (4 units)

acquiring understanding of, and sensitivity to, individuals from diverse backgrounds and the interpersonal skills to work with them. Included are social class, ethnic, racial, sexual, and lifestyle differences

- EPSY 6752 - Cross-Cultural Counseling *Units: 4*

6. Ability to conduct and interpret research (4 units)

- EPSY 6023 - Research in Applied Behavioral Sciences *Units: 4*

7. Laws and ethical principles as they apply to the practice of professional counseling (3 units)

- EPSY 6785 - Law and Ethics in Counseling *Units: 3*

8. Community mental health theories and skills (4)

- EPSY 6775 - Community Mental Health Counseling *Units: 4*

B. Fieldwork Requirement (9 units)

A minimum of three quarters of fieldwork is required in the application of counseling procedures and assessment techniques in fieldwork settings.

- EPSY 6670 - Field Work Group Supervision I *Units: 3*
- EPSY 6671 - Field Work Group Supervision II *Units: 3*
- EPSY 6672 - Field Work Group Supervision III *Units: 3*

C. Capstone Experience (0-9 units)

Students must successfully complete either a University Thesis, a Departmental Thesis, a Project, or a Comprehensive Examination, and should select option (1), (2), (3), or (4).

Option 1.

- EPSY 6899 - Project *Units: 2-5* ¹
- or*
- EPSY 6021 - Thesis-Project Seminar (Mild-Moderate Disabilities Option) *Units: 3*

Option 2.

- EPSY 6909 - Departmental Thesis *Units: 2-5*
- or*
- EPSY 6021 - Thesis-Project Seminar (Mild-Moderate Disabilities Option) *Units: 3* ¹

Option 3.

- EPSY 6910 - University Thesis *Units: 1-9* ²
- or*
- EPSY 6021 - Thesis-Project Seminar (Mild-Moderate Disabilities Option) *Units: 3*

Option 4.

Comprehensive Examination *Units: 0*

Note:

- Students completing a Project or a Departmental Thesis and registering for EPSY 6899 or EPSY 6909, even if combined with EPSY 6021, are limited to a total of 5 units. EPSY 6021 can be repeated for a total of 6 units; however, only five of these six units may be applied to the M.S. degree for students doing a Project or Departmental Thesis
- Students completing a University Thesis may enroll in EPSY 6021 for up to 6 units.

III. Options (19-22 units)

Option Requirements listed below.

IV. Electives (1-20 units)

Elective courses to be determined by advisor/coordinator. Total number of elective units for the masters depend on the degree option.

Note:

Additional course work, beyond that required for the masters, may be required for professional licensure and/or credentials.

Other courses recommended as electives:

- ANTH 3745 - Human Sexuality: Anthropological Perspectives *Units: 4*
- COMM 4830 - Intercultural Communication *Units: 4*
- EPSY 5021 - Introduction to Educating all Students in Diverse Classrooms *Units: 4*
- EPSY 5610 - Microcounseling I *Units: 2*
- EPSY 5620 - Microcounseling II *Units: 2*
- EPSY 6025 - Psychopathology of Childhood *Units: 4*
- EPSY 6029 - Seminar in Chemical Dependency *Units: 2*
- EPSY 6131 - Assessments: Students with Mild-Moderate Disabilities *Units: 4*
- EPSY 6301 - Pediatric Psychology *Units: 4*
- EPSY 6400 - Family Psychotherapy *Units: 4*
- EPSY 6403 - Psychotherapy for Children *Units: 4*
- EPSY 6402 - Couples Therapy *Units: 4*
- EPSY 6406 - Seminar in Human Sexuality *Units: 2*
- EPSY 6500 - Cognitive Behavior Therapy *Units: 4*
- EPSY 6610 - Graduate Seminar I *Units: 2*
- EPSY 6620 - Graduate Seminar II *Units: 2*
- EPSY 6630 - Graduate Seminar III *Units: 2*
- EPSY 6746 - Neuropsychology of Learning Disabilities *Units: 4*
- EPSY 6751 - Counseling and Psychotherapy Theory *Units: 4*
- EPSY 6754 - Cross-Cultural Consultation *Units: 4*
- EPSY 6764 - Intervention Strategies for Systems and Organizational Change *Units: 4*
- EPSY 6770 - Internship *Units: 2-6*
- EPSY 6783 - Seminar: Contemporary Issues *Units: 2-3*
- EPSY 6786 - Child Abuse Assessment *Units: 1*
- EPSY 6810 - Advanced Graduate Seminar I *Units: 2*
- EPSY 6820 - Advanced Graduate Seminar II *Units: 2*
- EPSY 6830 - Advanced Graduate Seminar III *Units: 2*
- EPSY 6860 - Advanced Fieldwork I *Units: 2-4*
- EPSY 6870 - Advanced Field Work Group Supervision I *Units: 3*
- EPSY 6871 - Advanced Field Work Group Supervision II *Units: 3*
- EPSY 6872 - Advanced Field Work Group Supervision III *Units: 3*
- EPSY 6880 - Advanced Internship *Units: 2-15*
- ES 3105 - African American Identity *Units: 4*
- ES 3310 - God is Red: American Indian World View *Units: 4*
- ES 4290 - Latino Politics and Public Policy *Units: 4*
- HDEV 3800 - Human Development and Interaction *Units: 4*

- HDEV 4004 - Current Issues in Aging *Units: 4*
- HDEV 4325 - Lesbian and Gay Lifespan Development *Units: 4*
- HDEV 4350 - Intimate Relationships Throughout the Life Span *Units: 4*
- HDEV 4440 - Lesbian and Gay Lifespan Development *Units: 4*
- PSYC 3420 - Stress and Coping *Units: 4*
- PSYC 3520 - Interpersonal Processes *Units: 4*
- PSYC 3540 - Groups and Organizations *Units: 4*
- PSYC 4300 - Motivation *Units: 4*
- PSYC 4320 - Physiological Psychology *Units: 4*
- PSYC 4360 - Psychopharmacology *Units: 4*
- SOC 3410 - Sociology of the Family *Units: 4*
- SOC 3411 - Sociology of Gender *Units: 4*
- SOC 3750 - Alcohol and Drug Abuse *Units: 4*
- SPPA 6060 - Advanced Study of Language Disorders in Children *Units: 4*

Note:

Public Administration courses may be used as electives by students completing the combined program with Public Administration.

Marriage and Family Therapy Option (20-22 units)

- EPSY 6025 - Psychopathology of Childhood *Units: 4*
or EPSY 6026 Psychopathology in Adulthood
- EPSY 6027 - Chemical Dependence Theory *Units: 4*
or EPSY 6029 Seminar in Chemical Dependency
- EPSY 6400 - Family Psychotherapy *Units: 4*
- EPSY 6403 - Psychotherapy for Children *Units: 4*
- EPSY 6406 - Seminar in Human Sexuality *Units: 2*
- EPSY 6500 - Cognitive Behavior Therapy *Units: 4*
or EPSY 6751 Counseling and Psychotherapy Theory

Counseling Programs of Study

Clinical Child/School Psychology Program

Includes:

Clinical Child/School Psychology Option

Marriage and Family Therapy Option

School Psychology Credential

Faculty: John M. Davis, Greg Jennings (Coordinator), Rolla E. Lewis, Janet Logan, Oanh Tran

The Clinical Child/School Psychology (CCSP) program at CSUEB is committed to a training philosophy that promotes the educational and social-emotional development of children, youth, and families. It is considered essential that each student develop sound professional values along with the acquisition of professional knowledge. An ecological human development perspective and collaborative consultation skills are emphasized, with the understanding that the ability to work collaboratively with families, teachers, and communities is critical to helping children succeed. As a fundamental principle of ethical practice, assessment, consultation, and intervention skills are inextricably linked throughout the curriculum. Program development and evaluation skills are also emphasized in order to ensure that graduates are well prepared to promote effective system-level intervention programs for meeting the needs of children, schools, families, and communities.

Multicultural issues are addressed as an integral and essential component of every course the department offers. It is the mission of the department, College of Education and Allied Studies, and university to prepare leaders for a diverse society. It is also the explicit goal of the Clinical Child/School Psychology program to prepare students to work effectively with children and families across the full spectrum of culture, ethnicity, and individual differences. The program is also developing training experiences that emphasize the development of skills in cultural competency.

The Clinical Child/School Psychology program provides the only course of study in the department leading to the School Psychology credential. This program also offers the academic and minimum fieldwork requirements for the Marriage and Family Therapy license and the Educational Psychology license.

The candidate for a credential must demonstrate an increasing ability to establish constructive interpersonal relationships with persons of differing ages, cultures, and experiential backgrounds (including children who may have endured severe physical or emotional trauma) in a manner that promotes confidence, mental health, social adjustment, and learning. The candidate must demonstrate increasing ability to establish satisfactory working relationships with parents, teachers, school personnel, and other community members involved in a particular case. The candidate must also demonstrate increasing ability to apply professional methods and techniques at proficiency levels significantly higher than those generally required in academic coursework.

To ensure that candidates have opportunity to develop the skills necessary for credential eligibility, specific credential competencies have been integrated into all courses required for a credential. In order to demonstrate at least minimal competencies in the required skills, therefore, the credential candidate must earn a grade of "B" or higher in each of these courses. In the event that a candidate does not achieve the criterion of "B" work in a required course, (s)he must consult immediately with the faculty, to determine a plan that will provide opportunity for remediation. Any candidate who receives a grade of "C" or lower in a required course will be classified automatically as probationary in the credential program; a second grade of "C" or lower will be considered sufficient basis for disqualification from the credential program and the related Master of Counseling degree program. Students are expected to have completed all prerequisites before entering the program. Candidates must take all courses that are required by the program, degree, and credential at California State University, East Bay.

Fieldwork and practical experiences, as evaluated by faculty and field supervisors, must also reflect a candidate's ability to meet the competencies specified in the program documents. Professional and interpersonal skills are the primary determinants of success in these settings. Any candidate who receives a grade of "NC" (No Credit) in a required fieldwork or internship course will be classified automatically as probationary in both the credential program and the Master of Counseling degree program. A meeting with the Coordinator of the School Psychology program will be required before additional registration in fieldwork or internship courses will be considered valid for credit toward a credential. A second grade of "NC" will be considered sufficient basis for disqualification from the credential program and the Master of Counseling degree program.

The program supports the development of the professional maturity of all candidates. The CCSP faculty evaluates candidates' professional and interpersonal maturity throughout the program. Only students who have demonstrated a high level of professional and personal integrity consistent with the role of the school psychologist will be recommended for the Pupil Personnel Services Credential in School Psychology upon completion of coursework, fieldwork, internship and Praxis exam results.

Candidates who fail to demonstrate professional and personal responsibility (as evidenced by violations of professional, interpersonal trust, or ethical practice) are subject to termination from the CCSP Program.

Candidates are to apply for their credential upon graduation. After graduation a recommendation for the credential will be based on the University currency limitation of 5 years and determined by the currency of the required course work, fieldwork experience, and portfolio.

Marriage and Family Therapy Program

Marriage and Family Therapy Option

Faculty: Randi Cowdery (Coordinator), Terry Soo-Hoo

The faculty supervising this program are committed to training psychotherapists and mental health specialists for a variety of settings, such as private practice, social service agencies, schools, universities, hospitals, businesses, and industry.

Students admitted to this program of study will focus on the M.S. in Counseling with the option in Marriage and Family Therapy. The main focus of this program is on training psychotherapists who eventually plan to obtain a California license to practice marriage and family therapy. The program provides a course of study leading toward completion of the academic requirements and the 150 hours clinical experience required for application for the MFT license.

Graduates have been hired to work with clients in a wide range of agencies and businesses. Some are counselors in junior colleges and college counseling centers. Others are drug and alcohol abuse counselors in hospitals, family therapists-on-site in schools, advocates for the mentally ill, child therapists in therapeutic nursery schools, assessment counselors, information and referral clinicians in employee assistance programs, individual and family therapists for police departments, organizational development specialists, and human resource professionals in business and industry.

Some graduates have pursued doctoral-level work in clinical and counseling psychology or education after completing their master's degree in this program. Over the years, students have been accepted to programs in many universities, including the University of Missouri, the University of

California at Berkeley, Michigan State University, Stanford University, California School of Professional Psychology, the Wright Institute, the University of Florida, the University of Texas, and the University of Wisconsin.

Students are trained for clinical work with individuals who are struggling with normal life problems, as well as individuals with more extensive psychopathology. Coursework covering various theories of individual, child, couple and family therapy prepares students well for advanced post-graduate internship work in clinical specializations of their choice. Students, as part of their clinical skills development, are also trained to lead counseling groups of children or adults.

Students take both evening and day classes. The program, however, cannot be completed entirely through evening classes. Groups of students are admitted annually.

The Marriage and Family Therapy program is designed to encourage growth and development of the students enrolled. Expansion of students' awareness and perspectives is emphasized. The faculty are licensed as marriage and family therapists or as psychologists. They are involved in clinical practices and are committed to preparing psychotherapists and consultants.

School Counseling, and Marriage and Family Therapy Program

Includes:

Marriage and Family Therapy Option

School Counseling Credential

Faculty: John M. Davis, Greg Jennings, Rolla E. Lewis (Coordinator), Janet Logan, Oanh Tran

Students enrolled in this program complete the M.S. in Counseling with a focus on both School Counseling and Marriage and Family Therapy (MFT). They are prepared to participate in, and to provide leadership for, a highly collaborative, prevention-based model for service delivery in the 21st century. This model involves the weaving together of educational services with community health, mental health, and other social services, as well as a strong focus on family issues and school-based/linked services.

The School Counseling and MFT program is a two-year course of study that leads to the Pupil Personnel Services (PPS) School Counseling Credential and meets the academic requirements, as well as the minimum 150 hours of experience required for the MFT license. Students enroll in a full-time course load each quarter (fall, winter, and spring) for two academic years. Courses are offered during the day, in the evening, and on weekends. The trainees participate in fieldwork at least 1 1/2 to 2 days per week (approximately 12-15 hours/week) each year, for a total of 600 hours.

Coursework and fieldwork experiences emphasize the development of the student's ability to provide comprehensive developmental school counseling programs meeting national and state standards. Students acquire the skills to develop classroom and small group guidance curriculum. They also learn to conduct individual and group therapy, guidance counseling, consultation, and to provide leadership in the creation and evaluation of integrated, comprehensive prevention and intervention programs. In the fieldwork experience, trainees have specific assigned activities and supervised experiences related to the California Credentialing Standards for the PPS School Counseling Credential, and to the MFT licensing qualifications of the Board of Behavioral Sciences.

To be admitted to the program, students must complete five departmental prerequisites with a grade of "B" or higher (see prerequisites listed under "Core Requirements for M.S. in Counseling" earlier in this chapter. In addition, applicants must have taken the GRE or MA and CBEST exams prior to entering the program.

The department is committed to interdisciplinary training and the delivery of prevention, family-centered, school-based/linked mental health services. Students enrolled in this program, therefore, take many of their basic courses with faculty and students who are enrolled in other specialist programs such as marriage and family therapy, school psychology, and special education. The candidate must satisfy all credential competency requirements as defined in the approved credential documents. Specifically, the candidate must achieve a grade of "B" or higher in the required courses. If a grade of "B" or higher is not earned, the candidate must immediately consult with the faculty to determine the academic work necessary to achieve competency level. (The original grade will not be changed, however.) Two grades of "C" or lower in required courses are sufficient basis for disqualification from the program (as stated in the University Catalog). Candidates must also successfully complete 600 hours of fieldwork in schools, pass the Professional School Counselor PRAXIS exam (0421) with a minimum score determined by the department, and pass the CBEST exam in order to be eligible for the PPS School Counseling Credential.

Candidates are to apply for their credential upon graduation. After graduation a recommendation for the credential will be based on the University currency limitation of 5 years and determined by the currency of the required course work, fieldwork experience, and portfolio.

Counseling, School Counseling Option, M.S.

Program Description

There are three options within the M.S. degree in Counseling. These are designed to ensure the most thorough preparation for the profession and its subspecialties, as well as to provide the student a broad experience with points of view and philosophy in both theory and practice. The faculty is committed to the intellectual and social-emotional growth of the student as well as his or her professional preparation.

For administrative purposes, faculty and students are organized into three options, all of which lead to the M.S. in Counseling. Potential applicants are invited to seek appointments with faculty representatives of the three options to discuss their interests and philosophical orientations.

Licenses Related to Counseling Programs

The department does not issue licenses but does offer courses which are designed to meet the educational requirements of two State of California licenses. All licenses require additional experience beyond degrees, as well as written and oral exams administered by the appropriate board of the State of California.

Marriage and Family Therapy License

The M.S. Counseling degree has an option designed to meet the requirements of Sections 4980.37, 4980.40 and subdivisions (a) and (d) of Section 4980.41, Article 1 (Regulation: Chapter 13, Marriage, Family Therapy, of the Business and Professions Code, State of California). Students are advised to acquire and read the laws governing MFT licensure from the Board of Behavioral Sciences in Sacramento.

See your program advisor in the Educational Psychology department for the procedures required for application for this license. State documents must be requested by the applicant from the Board of Behavioral Science Examiners, 400 R Street, Sacramento, CA 95814-6240.

Grades: If a candidate for the university recommendation for MFT licensure has more than one "C" grade among the courses listed on the Board of Behavioral Sciences approval form, that form cannot be approved by the Designee of the Chief Academic Officer of Cal State East Bay.

Field Work Credit: Field work or internship courses represent the student's efforts and growth in the interpersonal skills basic to marriage, family, and child counseling. A student who receives a grade of "NC" (no credit) for one quarter is on probation regarding continuation in the MFT approval track. A second grade of "NC" will disqualify the student for continuation in the MFT option and ultimate university recommendation for the license. Further, candidates may be disqualified from this program for actions judged by the faculty to reflect unethical, unprofessional, or incompetent behavior or interpersonal skills.

Educational Psychology License

The Educational Psychology license is issued by the Board of Behavioral Sciences. A credential in School Psychology and three years of related experience are currently required.

Licensed Professional Clinical Counselor License

Students who earn the MS in Counseling are eligible for the Licensed Professional Clinical Counselor License, which is awarded by the California Board of Behavioral Science (BBS).

Requirements for M.S. in Counseling (72 units)

The M.S. degree in Counseling requires 72 units organized according to university requirements (see the Graduate/Post-Baccalaureate Admission and Degree Information chapter in this catalog). Requirements are established to ensure that each degree candidate obtains adequate breadth in subject matter, field experiences, and research.

I. Prerequisites (15 units minimum; not counted toward 72-unit total)

A baccalaureate degree with a major in psychology or in child or human development plus a statistics course. For applicants with baccalaureates in other majors, the following courses are required and will provide adequate background for a counseling graduate program:

- An introductory course in descriptive statistics (3 units)

- A course in abnormal or pathological behavior (3 units)
- A course in learning (3 units)
- A course in developmental psychology or human or child development (3 units)
- A course in personality theory or development (3 units)

II. Requirements (40-49 units)

A. Competency Area Requirements (31 units)

Students are required to demonstrate competency in the areas listed below. With the Dean's approval, students may substitute alternative related courses.

1. Basic theoretical and research knowledge of systems of counseling and psychotherapy (4 units)

- EPSY 6750 - Foundations of Counseling *Units: 4*

2. Knowledge of psychological, biological, and social development over the lifespan and related psycho-therapeutic interventions (4 units)

- EPSY 6302 - Individual Development *Units: 4*

3. Knowledge of group counseling and psychotherapy, consultation, systems analysis and change agents in organizations (4 units)

- EPSY 6762 - Group Procedures and Facilitation *Units: 4*

4. Knowledge of theory and procedures for collecting and evaluating clinical assessment data (4 units)

- EPSY 6701 - Appraisal Procedures: Standardized *Units: 4*
or
- EPSY 6720 - Theory and Assessment of Cognition *Units: 4*

5. Cultural perspectives in counseling: (4 units)

acquiring understanding of, and sensitivity to, individuals from diverse backgrounds and the interpersonal skills to work with them. Included are social class, ethnic, racial, sexual, and lifestyle differences

- EPSY 6752 - Cross-Cultural Counseling *Units: 4*

6. Ability to conduct and interpret research (4 units)

- EPSY 6023 - Research in Applied Behavioral Sciences *Units: 4*

7. Laws and ethical principles as they apply to the practice of professional counseling (3 units)

- EPSY 6785 - Law and Ethics in Counseling *Units: 3*

8. Community mental health theories and skills (4)

- EPSY 6775 - Community Mental Health Counseling *Units: 4*

B. Fieldwork Requirement (9 units)

A minimum of three quarters of fieldwork is required in the application of counseling procedures and assessment techniques in fieldwork settings.

- EPSY 6670 - Field Work Group Supervision I *Units: 3*
- EPSY 6671 - Field Work Group Supervision II *Units: 3*
- EPSY 6672 - Field Work Group Supervision III *Units: 3*

C. Capstone Experience (0-9 units)

Students must successfully complete either a University Thesis, a Departmental Thesis, a Project, or a Comprehensive Examination, and should select option (1), (2), (3), or (4).

Option 1.

- EPSY 6899 - Project *Units: 2-5* ¹
- or*
- EPSY 6021 - Thesis-Project Seminar (Mild-Moderate Disabilities Option) *Units: 3*

Option 2.

- EPSY 6909 - Departmental Thesis *Units: 2-5*
- or*
- EPSY 6021 - Thesis-Project Seminar (Mild-Moderate Disabilities Option) *Units: 3* ¹

Option 3.

- EPSY 6910 - University Thesis *Units: 1-9* ²
- or*
- EPSY 6021 - Thesis-Project Seminar (Mild-Moderate Disabilities Option) *Units: 3*

Option 4.

Comprehensive Examination *Units: 0*

Note:

- Students completing a Project or a Departmental Thesis and registering for EPSY 6899 or EPSY 6909, even if combined with EPSY 6021, are limited to a total of 5 units. EPSY 6021 can be repeated for a total of 6 units; however, only five of these six units may be applied to the M.S. degree for students doing a Project or Departmental Thesis
- Students completing a University Thesis may enroll in EPSY 6021 for up to 6 units.

III. Options (19-22 units)

Option Requirements listed below.

IV. Electives (1-20 units)

Elective courses to be determined by advisor/coordinator. Total number of elective units for the masters depend on the degree option.

Note:

Additional course work, beyond that required for the masters, may be required for professional licensure and/or credentials.

Other courses recommended as electives:

- ANTH 3745 - Human Sexuality: Anthropological Perspectives *Units: 4*
- COMM 4830 - Intercultural Communication *Units: 4*

- EPSY 5021 - Introduction to Educating all Students in Diverse Classrooms *Units: 4*
- EPSY 5610 - Microcounseling I *Units: 2*
- EPSY 5620 - Microcounseling II *Units: 2*
- EPSY 6025 - Psychopathology of Childhood *Units: 4*
- EPSY 6029 - Seminar in Chemical Dependency *Units: 2*
- EPSY 6131 - Assessments: Students with Mild-Moderate Disabilities *Units: 4*
- EPSY 6301 - Pediatric Psychology *Units: 4*
- EPSY 6400 - Family Psychotherapy *Units: 4*
- EPSY 6403 - Psychotherapy for Children *Units: 4*
- EPSY 6402 - Couples Therapy *Units: 4*
- EPSY 6406 - Seminar in Human Sexuality *Units: 2*
- EPSY 6500 - Cognitive Behavior Therapy *Units: 4*
- EPSY 6610 - Graduate Seminar I *Units: 2*
- EPSY 6620 - Graduate Seminar II *Units: 2*
- EPSY 6630 - Graduate Seminar III *Units: 2*
- EPSY 6746 - Neuropsychology of Learning Disabilities *Units: 4*
- EPSY 6751 - Counseling and Psychotherapy Theory *Units: 4*
- EPSY 6754 - Cross-Cultural Consultation *Units: 4*
- EPSY 6764 - Intervention Strategies for Systems and Organizational Change *Units: 4*
- EPSY 6770 - Internship *Units: 2-6*
- EPSY 6783 - Seminar: Contemporary Issues *Units: 2-3*
- EPSY 6786 - Child Abuse Assessment *Units: 1*
- EPSY 6810 - Advanced Graduate Seminar I *Units: 2*
- EPSY 6820 - Advanced Graduate Seminar II *Units: 2*
- EPSY 6830 - Advanced Graduate Seminar III *Units: 2*
- EPSY 6860 - Advanced Fieldwork I *Units: 2-4*
- EPSY 6870 - Advanced Field Work Group Supervision I *Units: 3*
- EPSY 6871 - Advanced Field Work Group Supervision II *Units: 3*
- EPSY 6872 - Advanced Field Work Group Supervision III *Units: 3*
- EPSY 6880 - Advanced Internship *Units: 2-15*
- ES 3105 - African American Identity *Units: 4*
- ES 3310 - God is Red: American Indian World View *Units: 4*
- ES 4290 - Latino Politics and Public Policy *Units: 4*
- HDEV 3800 - Human Development and Interaction *Units: 4*
- HDEV 4004 - Current Issues in Aging *Units: 4*
- HDEV 4325 - Lesbian and Gay Lifespan Development *Units: 4*
- HDEV 4350 - Intimate Relationships Throughout the Life Span *Units: 4*
- HDEV 4440 - Lesbian and Gay Lifespan Development *Units: 4*
- PSYC 3420 - Stress and Coping *Units: 4*
- PSYC 3520 - Interpersonal Processes *Units: 4*
- PSYC 3540 - Groups and Organizations *Units: 4*
- PSYC 4300 - Motivation *Units: 4*
- PSYC 4320 - Physiological Psychology *Units: 4*
- PSYC 4360 - Psychopharmacology *Units: 4*
- SOC 3410 - Sociology of the Family *Units: 4*
- SOC 3411 - Sociology of Gender *Units: 4*
- SOC 3750 - Alcohol and Drug Abuse *Units: 4*
- SPPA 6060 - Advanced Study of Language Disorders in Children *Units: 4*

Note:

Public Administration courses may be used as electives by students completing the combined program with Public Administration.

School Counseling Option (20 units)

For additional specific program requirements please see Pupil Personnel Credential: School Psychology Internship and School Psychology Specialization

- EPSY 6669 - Seminar in Mental Health Consultation *Units: 3*
- EPSY 6711 - Career-Life Planning *Units: 4*
- EPSY 6766 - Personal/Social Counseling in Schools *Units: 2*
- EPSY 6767 - Academic Counseling in Schools *Units: 3*
- EPSY 6768 - Foundations of School Counseling *Units: 4*
- EPSY 6764 - Intervention Strategies for Systems and Organizational Change *Units: 4*

Counseling Programs of Study

Clinical Child/School Psychology Program

Includes:

Clinical Child/School Psychology Option

Marriage and Family Therapy Option

School Psychology Credential

Faculty: John M. Davis, Greg Jennings (Coordinator), Rolla E. Lewis, Janet Logan, Oanh Tran

The Clinical Child/School Psychology (CCSP) program at CSUEB is committed to a training philosophy that promotes the educational and social-emotional development of children, youth, and families. It is considered essential that each student develop sound professional values along with the acquisition of professional knowledge. An ecological human development perspective and collaborative consultation skills are emphasized, with the understanding that the ability to work collaboratively with families, teachers, and communities is critical to helping children succeed. As a fundamental principle of ethical practice, assessment, consultation, and intervention skills are inextricably linked throughout the curriculum. Program development and evaluation skills are also emphasized in order to ensure that graduates are well prepared to promote effective system-level intervention programs for meeting the needs of children, schools, families, and communities.

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Marriage and Family Therapy Program

Marriage and Family Therapy Option

Faculty: Randi Cowdery (Coordinator), Terry Soo-Hoo

The faculty supervising this program are committed to training psychotherapists and mental health specialists for a variety of settings, such as private practice, social service agencies, schools, universities, hospitals, businesses, and industry.

Students admitted to this program of study will focus on the M.S. in Counseling with the option in Marriage and Family Therapy. The main focus of this program is on training psychotherapists who eventually plan to obtain a California license to practice marriage and family therapy. The program provides a course of study leading toward completion of the academic requirements and the 150 hours clinical experience required for application for the MFT license.

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Some graduates have pursued doctoral-level work in clinical and counseling psychology or education after completing their master's degree in this program. Over the years, students have been accepted to programs in many universities, including the University of Missouri, the University of California at Berkeley, Michigan State University, Stanford University, California School of Professional Psychology, the Wright Institute, the University of Florida, the University of Texas, and the University of Wisconsin.

Students are trained for clinical work with individuals who are struggling with normal life problems, as well as individuals with more extensive psychopathology. Coursework covering various theories of individual, child, couple and family therapy prepares students well for advanced post-graduate internship work in clinical specializations of their choice. Students, as part of their clinical skills development, are also trained to lead counseling groups of children or adults.

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School Counseling, and Marriage and Family Therapy Program

Includes:

Marriage and Family Therapy Option

School Counseling Credential

Faculty: John M. Davis, Greg Jennings, Rolla E. Lewis (Coordinator), Janet Logan, Oanh Tran

Students enrolled in this program complete the M.S. in Counseling with a focus on both School Counseling and Marriage and Family Therapy (MFT). They are prepared to participate in, and to provide leadership for, a highly collaborative, prevention-based model for service delivery in the 21st century. This model involves the weaving together of educational services with community health, mental health, and other social services, as well as a strong focus on family issues and school-based/linked services.

The School Counseling and MFT program is a two-year course of study that leads to the Pupil Personnel Services (PPS) School Counseling Credential and meets the academic requirements, as well as the minimum 150 hours of experience required for the MFT license. Students enroll in a full-time course load each quarter (fall, winter, and spring) for two academic years. Courses are offered during the day, in the evening, and on weekends. The trainees participate in fieldwork at least 1 1/2 to 2 days per week (approximately 12-15 hours/week) each year, for a total of 600 hours.

Coursework and fieldwork experiences emphasize the development of the student's ability to provide comprehensive developmental school counseling programs meeting national and state standards. Students acquire the skills to develop classroom and small group guidance curriculum. They also learn to conduct individual and group therapy, guidance counseling, consultation, and to provide leadership in the creation and evaluation of integrated, comprehensive prevention and intervention programs. In the fieldwork experience, trainees have specific assigned activities and supervised experiences related to the California Credentialing Standards for the PPS School Counseling Credential, and to the MFT licensing qualifications of the Board of Behavioral Sciences.

To be admitted to the program, students must complete five departmental prerequisites with a grade of "B" or higher (see prerequisites listed under "Core Requirements for M.S. in Counseling" earlier in this chapter. In addition, applicants must have taken the GRE or MA and CBEST exams prior to entering the program.

The department is committed to interdisciplinary training and the delivery of prevention, family-centered, school-based/linked mental health services. Students enrolled in this program, therefore, take many of their basic courses with faculty and students who are enrolled in other specialist programs such as marriage and family therapy, school psychology, and special education. The candidate must satisfy all credential competency requirements as defined in the approved credential documents. Specifically, the candidate must achieve a grade of "B" or higher in the required courses. If a grade of "B" or higher is not earned, the candidate must immediately consult with the faculty to determine the academic work necessary to achieve competency level. (The original grade will not be changed, however.) Two grades of "C" or lower in required courses are sufficient basis for disqualification from the program (as stated in the University Catalog). Candidates must also successfully complete 600 hours of fieldwork in schools, pass the Professional School Counselor PRAXIS exam (0421) with a minimum score determined by the department, and pass the CBEST exam in order to be eligible for the PPS School Counseling Credential.

Candidates are to apply for their credential upon graduation. After graduation a recommendation for the credential will be based on the University currency limitation of 5 years and determined by the currency of the required course work, fieldwork experience, and portfolio.

Economics, M.A.

Admission Requirements

To be considered for admission, students must hold a baccalaureate degree from an accredited college or university and have a grade point average of 2.75 or better over the last 90 quarter units or 60 semester units of their undergraduate program. A student who does not meet the grade point requirements may be admitted at the discretion of the department pending receipt of other evidence of the student's academic achievement.

International students must show English proficiency by posting an official TOEFL score of 580 or above (237 on the Computer-Based TOEFL), or by posting an official transcript showing graduation with a bachelor's degree from a U.S. college or university, or an international college or university where English is the principal language of instruction, or by an official letter from the college or university certifying that English was the language of instruction.

Students enrolling in the program are expected to have completed the equivalent of MATH 1810 and ECON 4000 (mathematical economics) or a two-course sequence in calculus; STAT 1000 or STAT 2010 or equivalent; and at least one course in intermediate micro-economics and one course in intermediate macro-economics. These course prerequisites must have been completed with a grade of 'C' or better and within 5 years of starting the program. Rare exceptions can be granted with permission from both the Department Chair and Graduate Advisor. Students who have not completed the Economics prerequisites may enroll in the undergraduate courses to fulfill the prerequisites.

Student Learning Outcomes

Students graduating with an M.A. in Economics from Cal State East Bay will be able to:

- Show an advanced understanding of economic theory.
- Show an advanced understanding of econometrics.
- Apply economic theory and methods to strategic and policy issues.
- Examine and Analyze economic data using appropriate specialized software.

Classification in the Program

There are three levels of advancement for students within the M.A. program: "Conditionally Classified Graduate" standing, "Classified Graduate" standing, and "Advancement to Candidacy." Note: If a student is in post-baccalaureate status but has not been accepted into a graduate degree program s(he) is an "Unclassified Post-baccalaureate" student. Admission to the university as an "Unclassified Post-baccalaureate" student in no way implies acceptance to a graduate degree program.

A. Conditionally Classified Graduate Standing

A student who has been admitted to a graduate degree program but who has not satisfied all prerequisite coursework or other requirements such as the University Writing Skills Requirement is a "Conditionally Classified Graduate" student. A student may be admitted to a graduate degree program as a "Conditionally Classified" graduate student upon:

- submission of a written application, with required supporting documents, to the Admissions Office declaring an intent to pursue the M.A. degree in Economics;
- acceptance by the department; and
- completion of other appropriate requirements as specified in the Admission/Graduate chapter in this catalog.

B. Classified Graduate Standing

A student who has been admitted to the M.A. program by meeting the requirements established in item 1 above; has fulfilled all prerequisite coursework and other requirements such as the University Writing Skills Requirement (UWSR); and has a strong background in economics may begin as a "Classified Graduate" student. Students admitted into the program but lacking such background will be designated as "Conditionally Classified Graduate" students until deficiencies are made up and they are recommended for "Classified Graduate" standing by the department. The student must have satisfied the University Writing Skills Requirement (UWSR) to become a "Classified Graduate" student. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

C. Advancement to Candidacy

To be Advanced to Candidacy in the M.A. program a student must:

- be a "Classified Graduate" student in good standing;
- have filed an approved program of study with the department;
- have completed at least 12 quarter units in Economics considered applicable by the department toward the M.A. degree requirements, including at least 8 quarter units of graduate level (6100-6999 series) work in residence at Cal State East Bay; and
- have been recommended for Advancement to Candidacy by the department.

Transfer of Courses

Upper division prerequisite and foundation and graduate courses will only be considered for equivalency or transfer credit if they are from AACSB accredited institutions. Exceptions will be made for programs that have current and signed agreements with the College of Business and Economics.

Requirements for Graduation

To be eligible for the M.A. degree in economics a student must:

A. have been Advanced to Candidacy

B. have completed 45 quarter units of graduate work as indicated in (C) below, of which:

- all must have been earned within the five years just preceding the completion of the requirements for the degree;
- not fewer than 32 must have been completed in residence;
- not fewer than 28 must have been in Economics courses in the 6100-6999 series;
- not more than 5 may have been for a thesis (ECON 6910);
- not more than 13 have been taken in "Unclassified Post-baccalaureate" status and/or for extension and/or transfer course credit, as approved by the department;
- each course must have a grade of "C" or better and all 45 units must result in at least a 3.00 GPA;

C. have completed a satisfactory program of study (45 units) as approved by the department and the graduate coordinator, to include:

1. Required Courses (20 units)

- ECON 6101 - Seminar: Micro-Economic Theory I *Units: 4*
- ECON 6102 - Seminar: Micro-Economic Theory II *Units: 4*
- ECON 6105 - Seminar: Macro-Economic Theory *Units: 4*
- ECON 6400 - Seminar: Econometrics *Units: 4*
- ECON 6511 - Advanced Applied Econometrics *Units: 4*

2. Five Seminars from: (20 units)

- ECON 6200 - Seminar: Comparative Economic Systems *Units: 4*
- ECON 6250 - Seminar: Project Analysis *Units: 4*
- ECON 6315 - Seminar: Monetary Theory *Units: 4*
- ECON 6370 - Seminar: Public Sector Economics *Units: 4*
- ECON 6520 - Seminar: Industrial Organization and Public Policy *Units: 4*
- ECON 6680 - Seminar: Labor Economics *Units: 4*
- ECON 6710 - Seminar: International Economic Development *Units: 4*

3. Choice of the following (5 units):

a. Research Methods

- ECON 6896 - Research Methods *Units: 5*

b. University Thesis

- ECON 6910 - University Thesis *Units: 1-6*

4. Pass a two-part comprehensive exam: one in micro-economic theory and one in macro-economic theory

5. Satisfy the other university requirements

Satisfy the other university requirements for graduation described in the Graduate and Postbaccalaureate Studies chapter at the beginning of the graduate section in this catalog. These include a 3.00 GPA and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Education, Curriculum Option, M.S.

M.S. in Education

The Department of Teacher Education offers four options for the Master of Science in Education degree: Early Childhood Education, Curriculum, Educational Technology Leadership, and Reading Instruction.

Admission

Upon admission to the university, a student with a baccalaureate degree usually is in "Unclassified Post-Baccalaureate" standing. An "Unclassified Post-Baccalaureate" student may enroll in those courses for which the prerequisites have been met. The department will not count courses taken to remove deficiencies toward degree requirements. No more than 13 units taken in "Unclassified Post-Baccalaureate" status can be applied toward a master's degree. This includes approved credit-bearing extension courses, transfer courses, and residence courses taken before admission to the master's degree program. Lower division, non-credit Extension, and Credit/No Credit (Pass/Fail) courses are not applicable to the degree except courses offered only for Credit/No Credit (Pass/Fail). Filing for a substitution for this last item is up to the student. Seven units of coursework from a basic credential program (Multiple or Single Subject) may be applied toward a master's degree.

A student with minor deficiencies in the requirements below may be admitted to a program as a "Conditionally Classified Graduate" student.

To be awarded "Classified Graduate" standing, a student must:

- have a GPA of 3.0 or better in all upper division work in the major and in all post-baccalaureate work;
- hold a valid teaching credential and/or show evidence of successful classroom teaching experience as determined by the department. (May be waived for a student in the Option in Early Childhood Education.);
- have met the University Writing Skills Requirement. (For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.)

Advancement to Candidacy

To be Advanced to Candidacy for the degree, a student must:

- have met the University Writing Skills Requirement; (For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.)
- be a "Classified Graduate" student in good standing;
- have completed at least 35 quarter units considered by the Department to be applicable toward the degree requirements with a GPA of 3.0 or better;
- have an approved program of study for the degree (on a Major Check Form) signed by the advisor;
- have completed or be currently enrolled in TED 6020, Research in Education;
- have been approved for Advancement to Candidacy by the department on recommendation of faculty teaching in the student's area of study. This is initiated by filing the form, Petition to Establish Thesis/Project Committee, with a thesis or project abstract attached, or by obtaining permission to register for the Graduate Synthesis course.

GPA Requirement

A student must maintain a GPA of 3.0 or higher in all courses taken in the approved program signed by the advisor, whether the courses are taken at Cal State East Bay or elsewhere. A student whose GPA falls below 3.0 will be placed on probationary status, will be subject to disqualification from the program, and may be recommended for dismissal from the university. (The department also requires that the use of the "CR/NC" grade option in any course applied to a master's and/or certificate program must be approved in advance by the Graduate Coordinator.)

Degree Requirements (45 units)

To receive the M.S. degree in Education, a student must have:

- been Advanced to Candidacy;
- completed 45-53 quarter units of approved graduate work, subject to the following conditions:
- all units must have been earned within the past five (5) years immediately preceding completion of the requirements for the degree;

- no fewer than thirty-two (32) quarter units may have been completed in residence (i.e., after admission to the program, as a regularly matriculated student) in the graduate program at Cal State East Bay;
- no fewer than three (3) nor more than six (6) quarter units may have been assigned to a University Thesis nor more than five (5) to a Department Thesis or Project, nor fewer than four (4) in the Graduate Synthesis course;
- no more than thirteen (13) quarter units of approved courses may be transferred from another institution, taken through approved extension courses (including Open University), or taken as an "Unclassified Post-Baccalaureate" student;
- at least twenty-two and one-half (22.5) quarter units must have been in courses in the 6000 series or equivalent graduate level;
- satisfied the University Writing Skills Requirement; (For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.)
- earned at least a 3.0 GPA in all post-baccalaureate work and in all graduate work at Cal State East Bay and in all units satisfying the requirements of the degree program;
- completed a University Thesis acceptable to the university, or a Department Thesis or Project acceptable to the department faculty, or completed the Graduate Synthesis course which includes passing a Comprehensive Examination;
- met, within five (5) years of admission to the program, the specific requirements of that program.

Graduation

A student must apply to graduate and request a degree check during the first two (2) weeks of the quarter prior to the quarter in which completion of the program is expected. Students must apply online and pay the required fee.

Master's Requirements

The Curriculum Option is designed to provide advanced special preparation or competencies for teachers and other educational professionals at all grade levels. The Curriculum Option is based on four core foundation courses and electives. The program is accredited by the National Council for the Accreditation of Teacher Education.

Student Learning Outcomes

Students graduating with an M.S. in Education, Option in Curriculum from Cal State East Bay will be able to:

- Identify, describe, and evaluate the multiple factors that influence K-12 curricula in California public schools (e.g., state standards, federal policies, policies of discipline-specific professional organizations);
- Develop an in-depth understanding of contemporary issues in curriculum and instruction in an area of professional interest;
- Utilize a variety of bibliographic tools to write a comprehensive review of the literature for a topic of professional interest; and
- Complete an action research project investigating a topic as it relates to the field of Education.

A. Core Foundation Courses (Minimum of 16 units)

Must be taken in the following order:

- TED 6300 - Foundations of Curriculum Development *Units: 4*
- TED 6700 - Advanced Educational Psychology *Units: 4*
- TED 6020 - Research in Education *Units: 4*
- TED 6901 - Graduate Synthesis *Units: 4*

Pending Department and Professor approval

Pending Department and Professor approval, students may elect to substitute one of the following for TED 6901:

- TED 6899 - Project *Units: 2-5*
- TED 6909 - Departmental Thesis *Units: 2-5*
- TED 6910 - University Thesis *Units: 1-6*

B. Elective Courses (16 29 units)

Depending on the number of units transfer in to the program, all students will complete 16-29 units of elective courses from the Department of Teacher Education. Counting the 16 units of core courses, 22.5 units of coursework must be at the 6000 level. Students may use the 20 units of required coursework for the State of California Reading and Literacy Added Authorization as elective units for the Curriculum Option. All elective units must be approved by the program coordinator.

C. Transfer Course Units (0-13 units)

13 quarter units (9 semester) from a graduate level credential program from an accredited university. Courses transferring into the master's must be from a completed credential program. Continuing Education/Extension units from other universities cannot be transferred into the MS program. All units cannot be older than 7 years upon completion of the MS in Education program. No courses (undergraduate or graduate level) used toward the completion of the terminal degree from CSUEB or any other university are permitted. In the event that the student does not have units to be transferred, 13 units can be taken in electives.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills requirement.

Education, Early Childhood Education Option, M.S.

M.S. in Education

The Department of Teacher Education offers four options for the Master of Science in Education degree: Early Childhood Education, Curriculum, Educational Technology Leadership, and Reading Instruction.

Admission

Upon admission to the university, a student with a baccalaureate degree usually is in "Unclassified Post-Baccalaureate" standing. An "Unclassified Post-Baccalaureate" student may enroll in those courses for which the prerequisites have been met. The department will not count courses taken to remove deficiencies toward degree requirements. No more than 13 units taken in "Unclassified Post-Baccalaureate" status can be applied toward a master's degree. This includes approved credit-bearing extension courses, transfer courses, and residence courses taken before admission to the master's degree program. Lower division, non-credit Extension, and Credit/No Credit (Pass/Fail) courses are not applicable to the degree except courses offered only for Credit/No Credit (Pass/Fail). Filing for a substitution for this last item is up to the student. Seven units of coursework from a basic credential program (Multiple or Single Subject) may be applied toward a master's degree.

A student with minor deficiencies in the requirements below may be admitted to a program as a "Conditionally Classified Graduate" student.

To be awarded "Classified Graduate" standing, a student must:

- have a GPA of 3.0 or better in all upper division work in the major and in all post-baccalaureate work;
- hold a valid teaching credential and/or show evidence of successful classroom teaching experience as determined by the department. (May be waived for a student in the Option in Early Childhood Education.);
- have met the University Writing Skills Requirement. (For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.)

Advancement to Candidacy

To be Advanced to Candidacy for the degree, a student must:

- have met the University Writing Skills Requirement; (For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.)
- be a "Classified Graduate" student in good standing;
- have completed at least 35 quarter units considered by the Department to be applicable toward the degree requirements with a GPA of 3.0 or better;

- have an approved program of study for the degree (on a Major Check Form) signed by the advisor;
- have completed or be currently enrolled in TED 6020, Research in Education;
- have been approved for Advancement to Candidacy by the department on recommendation of faculty teaching in the student's area of study. This is initiated by filing the form, Petition to Establish Thesis/Project Committee, with a thesis or project abstract attached, or by obtaining permission to register for the Graduate Synthesis course.

GPA Requirement

A student must maintain a GPA of 3.0 or higher in all courses taken in the approved program signed by the advisor, whether the courses are taken at Cal State East Bay or elsewhere. A student whose GPA falls below 3.0 will be placed on probationary status, will be subject to disqualification from the program, and may be recommended for dismissal from the university. (The department also requires that the use of the "CR/NC" grade option in any course applied to a master's and/or certificate program must be approved in advance by the Graduate Coordinator.)

Degree Requirements (45 units)

To receive the M.S. degree in Education, a student must have:

- been Advanced to Candidacy;
- completed 45-53 quarter units of approved graduate work, subject to the following conditions:
- all units must have been earned within the past five (5) years immediately preceding completion of the requirements for the degree;
- no fewer than thirty-two (32) quarter units may have been completed in residence (i.e., after admission to the program, as a regularly matriculated student) in the graduate program at Cal State East Bay;
- no fewer than three (3) nor more than six (6) quarter units may have been assigned to a University Thesis nor more than five (5) to a Department Thesis or Project, nor fewer than four (4) in the Graduate Synthesis course;
- no more than thirteen (13) quarter units of approved courses may be transferred from another institution, taken through approved extension courses (including Open University), or taken as an "Unclassified Post-Baccalaureate" student;
- at least twenty-two and one-half (22.5) quarter units must have been in courses in the 6000 series or equivalent graduate level;
- satisfied the University Writing Skills Requirement; (For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.)
- earned at least a 3.0 GPA in all post-baccalaureate work and in all graduate work at Cal State East Bay and in all units satisfying the requirements of the degree program;
- completed a University Thesis acceptable to the university, or a Department Thesis or Project acceptable to the department faculty, or completed the Graduate Synthesis course which includes passing a Comprehensive Examination;
- met, within five (5) years of admission to the program, the specific requirements of that program.

Graduation

A student must apply to graduate and request a degree check during the first two (2) weeks of the quarter prior to the quarter in which completion of the program is expected. Students must apply online and pay the required fee.

Master's Requirements

The Educational Technology Leadership Option provides the participants with additional technological knowledge and skills to create effective school district technology plans, to develop training programs for classroom teachers in the use of technology, to promote organizational change through technology, to manage technology resources and personnel in a school setting, and to apply their technical skills and knowledge to identify and utilize technological resources appropriately for the needs of the schools, school districts, and similar educational organizations. All the option's required courses address these technology needs of schools.

Student Learning Outcomes

Students graduating with an M.S. in Education, Option in Educational Technology Leadership from Cal State East Bay will be able to:

- Identify, describe, and evaluate a variety of factors that influence integration of technology into K-12 curricula in California public schools;

- Design and develop a variety of technology-based projects and utilize the projects in their courses to write a comprehensive review of elearning topics that relate to education as well as the industry;
- Propose and complete a research project investigating a topic of professional interest as it relates to education and technology; and
- Develop an in-depth understanding of current issues in technology and education in one of the following related to technology topics: elearning, planning and change; Web development; mathematics, science, language arts, and social studies, or learning theories and design of e-learning environments.

I. Prerequisites

Students must demonstrate knowledge and application of authoring systems, such as Hypercard, Director, Authorware, ToolBook, or must have experience with Web-based instruction. Basic knowledge of digital technologies and HTML is required. Advanced proficiency in one platform (e.g. Macintosh, Windows, UNIX) is required. Students will be accepted into the program based on an interview by a committee where they demonstrate their technology competence. Students are also required to maintain their level of competency in technology as long as they are graduate students in the program.

II. Curricular Requirements (45 units)

A. Core Courses (26-29 units)

- TED 6020 - Research in Education *Units: 4*
- TED 6300 - Foundations of Curriculum Development *Units: 4*
- TED 6700 - Advanced Educational Psychology *Units: 4*
- TED 6901 - Graduate Synthesis *Units: 4*

B. Core Courses to the Option (25 units)

- TED 6070 - Graduate Studies in Early Childhood Education: Language and Literacy Development *Units: 4*
- TED 6071 - Graduate Studies in Early Childhood Education: Integrated Language Arts and Social Studies *Units: 4*
- TED 6072 - Graduate Studies in Early Childhood Education: Integrated Mathematics and Science *Units: 4*
- TED 6073 - Graduate Studies in Early Childhood Education: Integrated Arts *Units: 2*
- TED 6074 - Graduate Studies in Early Childhood Education: Integrated Arts *Units: 4*
- TED 6075 - Early Childhood Education: Professional Leadership Seminar *Units: 4*
- TED 6076 - Early Childhood Education: Professional Practicum *Units: 4*

C. Electives to the Option (4 units)

- TED 6015 - Using Research to Improve Learning *Units: 4*
- TED 6124 - Advanced Study in Multicultural Education *Units: 4*
- TED 6245 - Literature for the Young Child *Units: 4*
- TED 6900 - Independent Study *Units: 1-4*
- TED 6999 - Issues in Teacher Education *Units: 1-4*

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills requirement.

Education, Educational Technology Leadership Option, M.S.

M.S. in Education

The Department of Teacher Education offers four options for the Master of Science in Education degree: Early Childhood Education, Curriculum, Educational Technology Leadership, and Reading Instruction.

Admission

Upon admission to the university, a student with a baccalaureate degree usually is in "Unclassified Post-Baccalaureate" standing. An "Unclassified Post-Baccalaureate" student may enroll in those courses for which the prerequisites have been met. The department will not count courses taken to remove deficiencies toward degree requirements. No more than 13 units taken in "Unclassified Post-Baccalaureate" status can be applied toward a master's degree. This includes approved credit-bearing extension courses, transfer courses, and residence courses taken before admission to the master's degree program. Lower division, non-credit Extension, and Credit/No Credit (Pass/Fail) courses are not applicable to the degree except courses offered only for Credit/No Credit (Pass/Fail). Filing for a substitution for this last item is up to the student. Seven units of coursework from a basic credential program (Multiple or Single Subject) may be applied toward a master's degree.

A student with minor deficiencies in the requirements below may be admitted to a program as a "Conditionally Classified Graduate" student.

To be awarded "Classified Graduate" standing, a student must:

- have a GPA of 3.0 or better in all upper division work in the major and in all post-baccalaureate work;
- hold a valid teaching credential and/or show evidence of successful classroom teaching experience as determined by the department. (May be waived for a student in the Option in Early Childhood Education.);
- have met the University Writing Skills Requirement. (For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.)

Advancement to Candidacy

To be Advanced to Candidacy for the degree, a student must:

- have met the University Writing Skills Requirement; (For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.)
- be a "Classified Graduate" student in good standing;
- have completed at least 35 quarter units considered by the Department to be applicable toward the degree requirements with a GPA of 3.0 or better;
- have an approved program of study for the degree (on a Major Check Form) signed by the advisor;
- have completed or be currently enrolled in TED 6020, Research in Education;
- have been approved for Advancement to Candidacy by the department on recommendation of faculty teaching in the student's area of study. This is initiated by filing the form, Petition to Establish Thesis/Project Committee, with a thesis or project abstract attached, or by obtaining permission to register for the Graduate Synthesis course.

GPA Requirement

A student must maintain a GPA of 3.0 or higher in all courses taken in the approved program signed by the advisor, whether the courses are taken at Cal State East Bay or elsewhere. A student whose GPA falls below 3.0 will be placed on probationary status, will be subject to disqualification from the program, and may be recommended for dismissal from the university. (The department also requires that the use of the "CR/NC" grade option in any course applied to a master's and/or certificate program must be approved in advance by the Graduate Coordinator.)

Degree Requirements (45 units)

To receive the M.S. degree in Education, a student must have:

- been Advanced to Candidacy;
- completed 45-53 quarter units of approved graduate work, subject to the following conditions:
- all units must have been earned within the past five (5) years immediately preceding completion of the requirements for the degree;
- no fewer than thirty-two (32) quarter units may have been completed in residence (i.e., after admission to the program, as a regularly matriculated student) in the graduate program at Cal State East Bay;
- no fewer than three (3) nor more than six (6) quarter units may have been assigned to a University Thesis nor more than five (5) to a Department Thesis or Project, nor fewer than four (4) in the Graduate Synthesis course;

- no more than thirteen (13) quarter units of approved courses may be transferred from another institution, taken through approved extension courses (including Open University), or taken as an "Unclassified Post-Baccalaureate" student;
- at least twenty-two and one-half (22.5) quarter units must have been in courses in the 6000 series or equivalent graduate level;
- satisfied the University Writing Skills Requirement; (For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.)
- earned at least a 3.0 GPA in all post-baccalaureate work and in all graduate work at Cal State East Bay and in all units satisfying the requirements of the degree program;
- completed a University Thesis acceptable to the university, or a Department Thesis or Project acceptable to the department faculty, or completed the Graduate Synthesis course which includes passing a Comprehensive Examination;
- met, within five (5) years of admission to the program, the specific requirements of that program.

Graduation

A student must apply to graduate and request a degree check during the first two (2) weeks of the quarter prior to the quarter in which completion of the program is expected. Students must apply online and pay the required fee.

Master's Requirements

The Educational Technology Leadership Option provides the participants with additional technological knowledge and skills to create effective school district technology plans, to develop training programs for classroom teachers in the use of technology, to promote organizational change through technology, to manage technology resources and personnel in a school setting, and to apply their technical skills and knowledge to identify and utilize technological resources appropriately for the needs of the schools, school districts, and similar educational organizations. All the option's required courses address these technology needs of schools.

Student Learning Outcomes

Students graduating with an M.S. in Education, Option in Educational Technology Leadership from Cal State East Bay will be able to:

- Identify, describe, and evaluate a variety of factors that influence integration of technology into K-12 curricula in California public schools;
- Design and develop a variety of technology-based projects and utilize the projects in their courses to write a comprehensive review of elearning topics that relate to education as well as the industry;
- Propose and complete a research project investigating a topic of professional interest as it relates to education and technology; and
- Develop an in-depth understanding of current issues in technology and education in one of the following related to technology topics: elearning, planning and change; Web development; mathematics, science, language arts, and social studies, or learning theories and design of e-learning environments.

I. Prerequisites

Students must demonstrate knowledge and application of authoring systems, such as Hypercard, Director, Authorware, ToolBook, or must have experience with Web-based instruction. Basic knowledge of digital technologies and HTML is required. Advanced proficiency in one platform (e.g. Macintosh, Windows, UNIX) is required. Students will be accepted into the program based on an interview by a committee where they demonstrate their technology competence. Students are also required to maintain their level of competency in technology as long as they are graduate students in the program.

II. Curricular Requirements (45 units)

A. Core Courses (26-29 units)

- EDUI 6110 - Web as an Interactive Educational Tool *Units: 4*
- EDUI 6200 - Learning Theories and the Design of E-learning Environments *Units: 4*
- EDUI 6280 - Mathematics, Science and Technology in Education *Units: 4*
- EDUI 6350 - Educational Technology in the Teaching of Language and Social Studies *Units: 4*
- EDUI 6500 - Research in Educational Technology *Units: 4*
- EDUI 6600 - Educational Interface Design *Units: 4*

B. Electives (16-19 units minimum)

- EDUI 6002 - Animation for the Web *Units: 2*
- EDUI 6005 - Digital Graphics *Units: 4*
- EDUI 6098 - Designing Effective Multimedia Instruction *Units: 4*
- EDUI 6120 - Distance Learning Technologies and Applications *Units: 4*
- EDUI 6150 - Current Issues in Educational Technology *Units: 4*
- EDUI 6210 - Principles of Instructional Design *Units: 4*
- EDUI 6300 - Culture and the Evolution of Educational Technology *Units: 4*
- EDUI 6315 - Current Technologies in Education *Units: 2*
- EDUI 6400 - Educational Technology Planning for Innovation and Change *Units: 4*
- EDUI 6420 - Technology Internship *Units: 4*
- EDLD 6410 - Supervision and Staff Development *Units: 4*
- MM 6101 - Multimedia Seminar *Units: 4*
- MM 6102 - Application of Learning Theories to Multimedia Design *Units: 4*
- MM 6110 - Tech II: Multimedia Network and Hardware Development *Units: 4*
- MM 6120 - Tech III: Multimedia Software Development *Units: 4*
- MM 6805 - Forum *Units: 1*
- PSYC 4200 - Conditioning and Learning *Units: 4*
- PSYC 4210 - Theories of Learning *Units: 4*
- PSYC 4220 - Cognitive Processes *Units: 4*
- PSYC 4320 - Physiological Psychology *Units: 4*
- PSYC 4345 - Sensation and Perception *Units: 4*
- PUAD 6765 - Organizational Diagnosis and Assessment *Units: 4*
- PUAD 6811 - Human Organizations and Social Realities *Units: 4*
- PUAD 6812 - Changing Human Organizations *Units: 4*
- STAT 3900 - Data Analysis Using Statistical Packages *Units: 4*

Note:

Since students come to the program with varying technology backgrounds and interests, they may choose graduate-level courses from other departments with advisor approval.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills requirement.

Education, Online Teaching and Learning Option, M.S.

General Information

The **Interdisciplinary Studies Cluster** (College of Education and Allied Studies) program is built on the recognition that there are some issues that cross disciplines or professional areas within the College of Education and Allied Studies. It develops cross-disciplinary courses and experiences for students at the same time it provides a base for those subjects, programs, and faculty not currently embraced by any one department. It promotes interdisciplinary collaboration among students and faculty in the college, builds partnerships, and broadens program offerings for current and new students. By involving faculty from three or more departments in common endeavors, the Interdisciplinary Studies Cluster actively encourages cross-departmental renewal and innovation. The Cluster offers the M.S. in Education, Option in Online Teaching described below.

Option in Online Teaching and Learning

I. Prerequisites

To be admitted to the Online Teaching and Learning Option in the M.S. in Education, students meet normal Cal State East Bay requirements for admission to a graduate program in Education. Students from schools where English is not the primary language of instruction are required to achieve a TOEFL score of at least 213 (550 on the former grading scale) for admission to the program.

II. Curricular Requirements (45 units)

Students work with designated program advisors. Communication with advisors is by e-mail, telephone, and video conference as necessary. Student orientation to the program is by means of the program website.

Students complete 45 units of approved coursework. All work applied toward the 45 units must be at an average grade of "B" (3.0) or higher, and no graduate-level required course may be at a grade below "B." Students who are qualified for admission to the program will be placed in the "Conditionally Classified Graduate" category. Upon completion of the University Writing Skills Requirement (which is satisfied with a "B" or better in OTL 6706), they will be placed in the "Classified Graduate" category. If students do not pass OTL 6706 with a "B" or better, they must take the Writing Skills Test (WST) to satisfy the University Writing Skills Requirement. If students do not pass the WST, they must take a course or courses (depending on the score they received on the WST), to improve their skills and satisfy the University Writing Skills Requirement. Students complete OTL 6899 Project (4.5) as the capstone experience.

A. Required Courses (36 units)

Students must complete OTL 6701 , OTL 6702 , OTL 6703 , and OTL 6704 before they may take any other courses.

- OTL 6701 - Introduction to Online Teaching and Learning *Units: 4.5*
- OTL 6702 - Teaching Models for Online Instruction *Units: 4.5*
- OTL 6703 - Technology Tools for Online Instruction *Units: 4.5*
- OTL 6704 - Designing Curriculum for Online Instruction *Units: 4.5*
- OTL 6705 - Educational Planning and Development for Online Programs *Units: 4.5*
- OTL 6706 - Research in Online Teaching and Learning *Units: 4.5*
- OTL 6707 - History and Culture of Online Learning Communities *Units: 4.5*
- OTL 6899 - Project *Units: 2-5*

B. Electives (9 units)

1. Theoretical: Choose one of the following (4.5 units)

- OTL 6772 - Content Development for Online Learning *Units: 4.5*
- OTL 6773 - Supervising and Evaluating Online Teaching *Units: 4.5*
- OTL 6774 - Current Issues in Online Learning *Units: 4.5*

2. Methodological: Choose one of the following (4.5 units)

- OTL 6780 - Building the Online Environment *Units: 4.5*
- OTL 6781 - Creating Digital Media for Online Instruction *Units: 4.5*
- OTL 6782 - Designing and Implementing User Interfaces for Online Instruction *Units: 4.5*
- OTL 6783 - Providing Interactivity in the Online Environment *Units: 4.5*

Education, Reading Instruction Option, M.S.

The Department of Teacher Education at California State University, East Bay offers two levels for graduate study in the area of reading and language arts:

The Reading and Literacy Added Authorization is granted by the California Commission on Teacher Credentialing (CCTC) upon recommendation by Cal State East Bay. It authorizes service as a reading specialist at a school site. This program is 20 quarter units.

The Master of Science Degree, with an Option in Reading Instruction is granted by Cal State East Bay. Candidates who have earned the Reading and Literacy Added Authorization or previously earned the Reading and Language Arts Specialist Credential, are eligible to continue their

graduate studies and earn the M.S. degree. This program is 45 quarter units (the 20 units for the Reading and Literacy Added Authorization, and 25 additional units).

Student Learning Outcomes

Students graduating with an M.S. in Education, Option in Reading Instruction from Cal State East Bay will be able to:

- Demonstrate a thorough understanding of theory and research on an effective culture of literacy for diverse pre-kindergarten through high school students, their families, and communities;
- Demonstrate knowledge of research-based instructional practices in each component of literacy and the ability to assess, instruct, and provide intervention for each component of literacy instruction, including phonemic awareness, phonics, fluency, oral language development, reading and listening comprehension, and vocabulary development, and writing;
- Plan and implement successfully a balanced literacy environment, including the selection and use instructional materials, technology, routines, and strategies that are appropriately aligned with students' assessed language and literacy needs; and
- Complete an action research project in the field of literacy, including a review of the research literature, planning and implementing an instructional unit, and an analysis of student learning and research results

I. Admission

Admission Requirements:

- Baccalaureate degree
- GPA of 3.0 in upper division undergraduate courses and post-baccalaureate courses
- A valid Multiple Subject or Single Subject Teaching Credential
- Satisfaction of the University Writing Skills Requirement. (For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.)
- Demonstrated potential to become a leader in reading and language arts curriculum and instruction

Admission Process:

Submit the following to the Department of Teacher Education:

- University graduate and post-baccalaureate application
- Graduate application fee
- Statement of residency if a first-time Cal State East Bay student
- One official copy of all transcripts from all colleges and universities attended
- Department of Teacher Education application
- Personal Data Summary Form
- CBEST scores
- Copy of either a valid Multiple Subject or Single Subject Teaching Credential
- Three letters of recommendation, two of which address the candidate's ability to teach and work with K-12 students

Candidates who meet admission requirements will be notified by mail and must then successfully complete an admission interview with the Program Coordinator.

II. Curricular Requirements

M.S. in Education with an Option in Reading Instruction (45 units)

M.S. in Education with an Option in Reading Instruction (45 units) (Also see the "M.S. in Education" section which follows for general information on Advancement to Candidacy, GPA requirements, and master's degree requirements.)

Reading and Literacy Added Authorization (20 units)

All *Reading and Literacy Added Authorization* units are required for Option in Reading Instruction.

- TED 6220 - Focus on Diversity *Units: 4*
- TED 6230 - Reading/Language Arts: Literacy Research and Methods I *Units: 4*
- TED 6231 - Reading/Language Arts: Literacy Assessment and Intervention I *Units: 4*

- TED 6232 - Reading/Language Arts: Literacy Assessment and Intervention II *Units: 4*
- TED 6253 - Reading/Language Arts: Literacy Research and Methods II *Units: 4*

Electives approved by advisor (13 units)

A total of 13 units of electives approved by the advisor, or 13 units from an accredited credential program, provided the units are no older than 7 years when the student graduates.

Also, 12 units consisting of:

- TED 6020 - Research in Education *Units: 4*
- TED 6250 - Reading Research and Evaluation *Units: 4*

and one of the following:

- TED 6899 - Project *Units: 2-5*
- TED 6901 - Graduate Synthesis *Units: 4*
- TED 6909 - Departmental Thesis *Units: 2-5*

Note:

Please note other requirements for the master's degree listed in the subsequent section, "M.S. in Education."

M.S. in Education

The Department of Teacher Education offers four options for the Master of Science in Education degree: Early Childhood Education, Curriculum, Educational Technology Leadership, and Reading Instruction.

Admission

Upon admission to the university, a student with a baccalaureate degree usually is in "Unclassified Post-Baccalaureate" standing. An "Unclassified Post-Baccalaureate" student may enroll in those courses for which the prerequisites have been met. The department will not count courses taken to remove deficiencies toward degree requirements. No more than 13 units taken in "Unclassified Post-Baccalaureate" status can be applied toward a master's degree. This includes approved credit-bearing extension courses, transfer courses, and residence courses taken before admission to the master's degree program. Lower division, non-credit Extension, and Credit/No Credit (Pass/Fail) courses are not applicable to the degree except courses offered only for Credit/No Credit (Pass/Fail). Filing for a substitution for this last item is up to the student. Seven units of coursework from a basic credential program (Multiple or Single Subject) may be applied toward a master's degree.

A student with minor deficiencies in the requirements below may be admitted to a program as a "Conditionally Classified Graduate" student.

To be awarded "Classified Graduate" standing, a student must:

- have a GPA of 3.0 or better in all upper division work in the major and in all post-baccalaureate work;
- hold a valid teaching credential and/or show evidence of successful classroom teaching experience as determined by the department. (May be waived for a student in the Option in Early Childhood Education.);
- have met the University Writing Skills Requirement. (For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.)

Advancement to Candidacy

To be Advanced to Candidacy for the degree, a student must:

- have met the University Writing Skills Requirement; (For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.)

- be a "Classified Graduate" student in good standing;
- have completed at least 35 quarter units considered by the Department to be applicable toward the degree requirements with a GPA of 3.0 or better;
- have an approved program of study for the degree (on a Major Check Form) signed by the advisor;
- have completed or be currently enrolled in TED 6020, Research in Education;
- have been approved for Advancement to Candidacy by the department on recommendation of faculty teaching in the student's area of study. This is initiated by filing the form, Petition to Establish Thesis/Project Committee, with a thesis or project abstract attached, or by obtaining permission to register for the Graduate Synthesis course.

GPA Requirement

A student must maintain a GPA of 3.0 or higher in all courses taken in the approved program signed by the advisor, whether the courses are taken at Cal State East Bay or elsewhere. A student whose GPA falls below 3.0 will be placed on probationary status, will be subject to disqualification from the program, and may be recommended for dismissal from the university. (The department also requires that the use of the "CR/NC" grade option in any course applied to a master's and/or certificate program must be approved in advance by the Graduate Coordinator.)

Degree Requirements (45 units)

To receive the M.S. degree in Education, a student must have:

- been Advanced to Candidacy;
- completed 45-53 quarter units of approved graduate work, subject to the following conditions:
- all units must have been earned within the past five (5) years immediately preceding completion of the requirements for the degree;
- no fewer than thirty-two (32) quarter units may have been completed in residence (i.e., after admission to the program, as a regularly matriculated student) in the graduate program at Cal State East Bay;
- no fewer than three (3) nor more than six (6) quarter units may have been assigned to a University Thesis nor more than five (5) to a Department Thesis or Project, nor fewer than four (4) in the Graduate Synthesis course;
- no more than thirteen (13) quarter units of approved courses may be transferred from another institution, taken through approved extension courses (including Open University), or taken as an "Unclassified Post-Baccalaureate" student;
- at least twenty-two and one-half (22.5) quarter units must have been in courses in the 6000 series or equivalent graduate level;
- satisfied the University Writing Skills Requirement; (For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.)
- earned at least a 3.0 GPA in all post-baccalaureate work and in all graduate work at Cal State East Bay and in all units satisfying the requirements of the degree program;
- completed a University Thesis acceptable to the university, or a Department Thesis or Project acceptable to the department faculty, or completed the Graduate Synthesis course which includes passing a Comprehensive Examination;
- met, within five (5) years of admission to the program, the specific requirements of that program.

Graduation

A student must apply to graduate and request a degree check during the first two (2) weeks of the quarter prior to the quarter in which completion of the program is expected. Students must apply online and pay the required fee.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills requirement.

Educational Leadership, M.S.

Program Description

The mission of the Department of Educational Leadership is to prepare bold, socially responsible leaders who will transform the world of schooling. Our central role is to help build the leadership capacity needed to create vital, democratic, professional learning communities for equitable learning and teaching.

The department offers graduate study leading to Doctor in Educational Leadership for Social Justice (Ed. D.), the Master of Science degree in Educational Leadership (MS) as well as programs approved by the California Commission on Teacher Credentialing leading to the Preliminary Administrative Services Credential (Tier I), Professional Administrative Services Credential (Tier II), and Internship Credential in Administrative Services (Education Code 44225 et al.). Students seeking the degree and any of the Administrative Services Credentials must meet the general university requirements as well as the departmental requirements listed below. Additional advising and information are available through the department and on the College of Education and Allied Studies website at: <http://www.edschool.csueastbay.edu>. The delivery format of all these programs include online for students residing away from CSUEB areas of service, and a combination of online and regular face to face classes for the program serving our direct area of service. Entry to the regular program is currently fall quarter, winter quarter for the online program, and summer quarter for the Ed.D.

Student Learning Outcomes

Students graduating with an M.S. in Educational Leadership from Cal State East Bay will be able to:

- Demonstrate knowledge, skills, and dispositions aligned with professional standards to implement universal design and research-based programs to achieve equitable learning outcomes;
- Demonstrate the ability to create environments, systems, and practices in which all individuals are treated with respect, dignity, trust, and fairness;
- Work collaboratively with students, parents, and professional colleagues to achieve equitable learning outcomes and equitable environments;
- Know and demonstrate the content knowledge, pedagogical content knowledge and skills, and pedagogical and professional knowledge and skills, as defined by the California Commission on Teacher Credentialing [CTC] Standards for the Preliminary Administrative Services Credential.

Career Opportunities

Completion of the credential and master's programs, and the doctoral degree, enables graduates to obtain an administrative credential that allows them to assume administrative positions at all levels of the K-12 public educational system. Various positions include those in school sites administration (e.g., principal, vice principal), and district level administration (curriculum coordinator, staff development coordinator, special programs coordinator, personnel director, assistant superintendent, superintendent, etc.). In addition, graduates also obtain many positions at the county and state level offices.

Faculty

The department has eight full-time professors and instructors with earned doctorates who have had extensive experience in administrative positions at various levels in the public schools before joining the faculty. Their previous positions include leadership coaching, principal, viceprincipal, district curriculum coordinator, staff development coordinator, county training center director, personnel director, assistant superintendent and superintendent. Several have extensive experience in large scale school reform efforts and educational research. The faculty draws its strength from their diversity of experiences, professional and research interests, expertise, gender, cultural, racial and ethnic backgrounds. They are actively engaged with schools in the Bay Area, serving as consultants (nationally and internationally) and coaches in many facets of schooling. They are recognized as leaders in numerous regional, statewide, and national networks and professional organizations. The faculty is complemented by a select group of lecturers who are respected practicing administrators in Bay Area school districts and county education offices.

Special Features

Cohort Groups: In the fall quarter, all students are admitted into class groups, called cohorts, whose members take at least three courses and fieldwork together as a group during fall-winter-spring. Preliminary Administrative Credential Candidates (including interns) take three additional required courses on an individual basis. The three-quarter cohort time frame permits examination of issues as recurring themes.

School District Collaboration: Some cohort programs are unique in that they involve school districts in identifying educational leadership candidates.

The Internship Program: The department offers a way to acquire an Internship Administrative Services Credential: the Individual Internship Option. This program allows candidates to serve in an administrative capacity while completing credential requirements and are open only to

students who are recommended by their districts and who hold either a full or a part-time administrative position. Students in the Individual Internship Option can participate in any cohort, but must register for internship fieldwork and attend an internship seminar once a month. The common bond of participants is the commitment to improving achievement of all students and to creating an inclusive learning environment that values and reflects the diversity of American society.

Admission

A candidate must be admitted to the university, consistent with requirements and procedures explained in this catalog. Interested candidates apply for admission to the department and to the university at the same time. Candidates should directly contact the department office, 510-885-4145, or go to the department website, in early January for fall quarter entrance. Candidates are admitted to the masters degree program, and have the option of completing the requirements for the Administrative Services Tier I (Preliminary) Credential by the end of their first year of enrollment. Applications for admission to the department are online at the departmental website. All admissions materials should be sent to the CSUEB Credential Student Service Center (CSSC), AE 235, 25800 Carlos Bee Blvd., Hayward, CA 94542.

Additional requirements for admission to the M.S. in Educational Leadership and/or the Preliminary Administrative Services Credential include:

- A bachelor's degree
- 3.0 GPA or equivalent on all post-baccalaureate work
- Successful passage of the University Writing Skills Requirement, e.g., CBEST
- A current, valid basic teaching credential or services credential (Pupil Personnel Services, Adult Education, Librarianship, Health Services School Nurse, or Clinical Rehabilitative Services)
- A minimum of three years full-time teaching or service experience as documented by district verification (form available on department website)
- Internship candidates must verify administrative position (form available on department website)
- A current resume showing evidence of leadership experience
- Three recommendations (form available on department website)
- A one-page statement of professional goals
- University application, including two sets of transcripts
- All credential candidates must apply for "Classified Graduate" status. Credential only students must also successfully meet the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Requirements for the Professional Administrative Services Credential Program include:

- Current Preliminary Administrative Services Credential
- Verification of position as a school administrator (form available on the department website)
- A current resume showing evidence of leadership experience
- For "Classified Graduate" status and Advancement to Candidacy, M.S. students must have successfully met the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.)
- For the M.S. degree university admission requirements, see the Admission/Graduate chapter of this catalog.

M.S. Degree Requirements

- A minimum of 45 quarter units of approved work, at least 32 of which must be in residence, and all completed within a five-year period.
- A 3.0 GPA or better in all 45 quarter units offered as satisfying the requirements of the degree program.
- Satisfactory completion of the University Writing Skills Requirement (required for "Classified Graduate" standing).
- Satisfactory completion of EDLD 6908 - Graduate Synthesis in Educational Leadership which includes a comprehensive examination.

Curricular Requirements (45 units)

The established pattern of required and approved courses is designed to meet both the preliminary credential and degree requirements. Students already holding credentials from other institutions take the degree and/or program requirements listed below and any additional courses required by department advisor to meet current MS degree and credential mandates.

A. Complete the following courses (36 units)

- EDLD 6000 - Introduction to Educational Leadership *Units: 4*
- EDLD 6020 - Research in Education *Units: 4*
- EDLD 6400 - Instructional Leadership *Units: 4*
- EDLD 6410 - Supervision and Staff Development *Units: 4*
- EDLD 6550 - School Site Leadership and Organizational Behavior *Units: 4*
- EDLD 6650 - Educational Law for Equity *Units: 4*
- EDLD 6675 - School Finance and Human Resources for Equity *Units: 4*
- EDLD 6720 - Solving School Problems through the Application of Research *Units: 4*
- EDLD 6908 - Graduate Synthesis in Educational Leadership *Units: 4*

B. Electives selected through consultation with advisor (9 units).

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills requirement.

Engineering Management, M.S.

Program Description

The Department of Engineering, in cooperation with the College of Business and Economics, offers an interdisciplinary Master of Science degree in Engineering Management. This degree is designed for working engineers and professionals who are in leadership/management positions or who are planning to advance their careers into the management of technical enterprises. It is also designed to benefit engineering or science graduates who are interested in assuming leadership positions in industry.

The objectives of the M.S. in Engineering Management are:

- to prepare future managers of technical enterprises;
- to enable current and future engineers/scientists to assume leadership positions as they advance in their careers; and
- to meet the demand for effective engineering managers who are able to lead technically complex industries.

This degree is different from other Engineering Management degrees in that it includes a well-balanced curriculum consisting of quantitative courses in industrial engineering and qualitative management courses. The curriculum gives students an understanding of both the engineering and management perspectives. This is valuable for individuals managing engineering/high tech firms.

Students take required courses in design and management of human work systems, systems simulation, applied quality assurance, product process design, project management, and research methods in engineering management. Also included in the core are courses in financial management and enterprise planning and control. Students also have a broad choice of electives, allowing them to select from many areas of specialization.

Career Opportunities

There is a great need for individuals who possess both technical background and management skills to run the large variety of technical enterprises. Traditionally, engineers move into management positions in technical enterprises without having a formal academic background in management. The Engineering Management graduate, however, is better equipped to recognize the effects of new technology on management issues and to understand the products and services produced by these technical firms. This understanding gives Engineering Management graduates an edge over traditional managers, and enables them to become effective leaders in the engineering industry.

Features

The M.S. in Engineering Management is designed to accommodate working adults with courses generally meeting in the evening. The interdisciplinary design of the program allows students to take courses from faculty in engineering, business, computer science and/or statistics. The elective courses in the curriculum give students the opportunity to concentrate study in their areas of interest.

Admission

The M.S. Degree in Engineering Management is open to students planning a career, or seeking to advance their career in managing technical enterprises who: (1) have a baccalaureate degree in engineering, basic science or related fields from an accredited institution, and (2) have earned an overall grade point average of 2.5 (4.0 basis) or better in their undergraduate work. Degrees from foreign institutions will be individually evaluated.

In addition to the University Graduate and Post-baccalaureate Application, all applicants should: (1) submit a personal statement with the application stating their reasons for wanting to pursue the M.S. in Engineering Management degree, describing relevant work experience, and explaining their past academic performance; (2) submit two letters of recommendation; and (3) submit a resume.

Admission to the university and admission to the M.S. in Engineering Management degree program are separate steps.

Student Standing and Progress Toward the Degree

There are three categories of student status which reflect student progress toward the degree: "Conditionally Classified Graduate," "Classified Graduate," and "Advancement to Candidacy."

- Students achieve "Conditionally Classified Graduate" status when they have been admitted to the M.S. in Engineering Management degree program, but have not yet completed the prerequisites for "Classified Graduate" status in the M.S. in Engineering Management degree program.
- Students achieve "Classified Graduate" status when they have satisfactorily completed the three prerequisites for the M.S. in Engineering Management degree program or their equivalents, and satisfied the University Writing Skills Requirement. (See "Prerequisites for Classified Graduate Status" below.)
- Students are Advanced to Candidacy when they have completed the required courses with a 3.0 or better GPA

Note: Students who fail to maintain progress by falling below a 3.0 GPA in their graduate courses for two or more consecutive quarters will be academically disqualified from the university.

Prerequisites for "Classified Graduate" Status

As prerequisites for "Classified Graduate" status, students must satisfy the University Writing Skills Requirement and satisfactorily complete the following three courses. *Each course must be completed with a grade of "B" or better.*

Note: Errata chapter - change in prerequisite.

- ACCT 2253 - Introduction to Managerial Accounting *Units: 4*
- ENGR 3140 - Engineering Economy
or
- INDE 3140 - Engineering Economy *Units: 4*
- STAT 3601 - Statistics and Probability for Science and Engineering I *Units: 4*
or
- INDE 3601 - Statistics and Probability for Science and Engineering I *Units: 4*
- or*
- STAT 5601 - Introductory Statistics and Probability for Science and Engineering *Units: 4*
or
- ENGR 5601 - Introductory Statistics and Probability for Science and Engineering *Units: 4*

Note:

Students can request to have one or more of these prerequisites waived based upon coursework taken at other schools. These prerequisite courses should be taken before attempting the core graduate courses. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Degree Requirements

The M.S. degree program in Engineering Management requires completion of 48 quarter units distributed among required courses, elective courses, and the Project course (or comprehensive examination and an additional four-unit elective course). Of these units, at least 35 units must be completed in residence (transfer units are limited to 13 quarter units); at least 24 units must be in courses in the 6000 series. No course numbered 1000 to 2999 (or equivalent if taken elsewhere) may be used as part of the 48-unit graduate degree program.

No more than 4 units of Independent Study (ENGR 6900) may be counted toward the 48 units required for the degree. Project credit may not exceed 4 units.

A grade point average of 3.0 must be maintained in all 48-quarter units taken to satisfy the degree requirements. All graduate degree requirements must be completed within five (5) years.

Curricular Requirements (48 units)

1. Required Courses (32 units)

- ENGR 5180 - Product/Process Design *Units: 4*
- ENGR 5200 - Systems Simulation *Units: 4*
- ENGR 5280 - Design and Management of Human Work Systems *Units: 4*
- ENGR 6200 - Project Management *Units: 4*
- ENGR 6300 - Applied Quality Assurance *Units: 4*
- ENGR 6400 - Research Methods in Engineering Management *Units: 4*
- FIN 6215 - Corporate Financial Management *Units: 4*
- MGMT 6130 - Enterprise Planning and Control *Units: 4*

2. Elective Courses (12 units)

Twelve (12) quarter units of graduate courses in Engineering, Business and Economics, Computer Science, Statistics, or related areas with advisor approval.

The following is a sample list of electives:

- ENGR 6150 - Production Planning and Control *Units: 4*
- ENGR 6350 - Reliability Engineering *Units: 4*
- ENGR 6420 - Systems Modeling *Units: 4*
- ENGR 6430 - Facilities Planning and Design *Units: 4*
- ENGR 6440 - Computer Integrated Manufacturing Systems *Units: 4*
- ENGR 6999 - Issues in Engineering *Units: 4*
- ENGR 6900 - Independent Study *Units: 1-4*
- ITM 6070 - Graduate Introduction to Information Technology Management
- MGMT 6150 - Global Supply Chain Management *Units: 4*
- MGMT 6470 - Management of Technology and Innovation *Units: 4*
- MGMT 6560 - High Performance Management *Units: 4*

3. Capstone Experience (4 units)

ENGR 6800 Research in Engineering Management; ENGR 6899 Project; or pass the comprehensive examination and complete an additional 4-unit elective course.

- ENGR 6899 - Project *Units: 1-4* or pass the comprehensive examination and complete an additional 4-unit elective course.

Incompletes

Students accumulating more than 8 units of work graded "I" may not register for courses applicable to the degree until the "I" grades are removed.

Capstone Experience

To complete a research project, students enroll in ENGR 6899 - Project 1-4. The Project is a capstone cumulative experience based on the coursework completed for the degree and is accompanied by a written document. A faculty member from the department supervises the student's work. One bound copy of the written component of the Project is required for the department.

Grades of "RP" (Report in Progress) may be given for a Project that is not completed at the end of the quarter. The "RP" grade must be removed within one year or it will become an "F."

Instead of enrolling in ENGR 6899 - Project, students can elect to take a comprehensive examination and complete an additional four-unit elective course. The comprehensive exam can be taken upon completion of the required courses.

Granting the Degree

Upon satisfaction of all requirements for the degree, the department will recommend that the candidate be granted the Master of Science degree in Engineering Management. Students must file for graduation by the end of the second week of the quarter prior to the quarter in which they expect to graduate.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

English (Literature, Composition, Creative Writing), M.A.

Program Description

The university offers the Master of Arts degree in English. Although there is no separate degree offered in Creative Writing, it is possible to satisfy the thesis option for the M.A. in English by work in fiction, poetry, or drama. The student seeking a degree must observe the general university requirements stated elsewhere in this catalog as well as the specific departmental requirements stated here. (Note: See the M.A. TESOL Program listed in the Programs of Study chapter.)

Student Learning Outcomes

Students graduating with an M.A. in English from Cal State East Bay will be able to:

- analyze and interpret various kinds of texts in clear and cogent prose;
- discuss several theoretical perspectives about literature or about applied linguistics (e.g., pedagogy, second language learning);
- demonstrate facility with conducting research in traditional/nontraditional ways, including library research, the Internet, and data collection and analysis.
- demonstrate the ability to learn independently.

Students graduating with an M.A. in English-T.E.S.O.L. option from Cal State East Bay will be able to:

- communicate effectively in the profession both orally and in writing;
- apply information literacy principles in their work as TESOL professionals;
- draw on knowledge of language ability to shape their instructional choices;
- use pedagogical content knowledge appropriate for a particular group of language learners;
- integrate principles of diversity and inclusiveness in their classrooms;
- select life-long learning strategies to stay current in the profession.

Students completing the M.A. degree in English will demonstrate in-depth knowledge of two areas including British/American literature, and literature or composition theory or creative writing; those in the TESOL option will demonstrate in-depth knowledge of adult ESL pedagogy and the linguistic underpinnings of this enterprise.

Admission

To apply for admission to the Master of Arts program in English, the student must fill out the proper forms obtained from and returned to the Admissions Office. (Contact the Graduate Coordinator for details on additional materials to be sent directly to the English Department.) The Admissions Office will then send the application to the English Department where it will be accepted or rejected. Also see admission requirements for the TESOL Option.

To be admitted to the M.A. program in English, the student must:

- hold the B.A. degree from an accredited college or university, with a major in English, and
- have an undergraduate GPA in English courses of at least 3.0. If the student cannot comply with these requirements, he or she may petition the department by letter for special consideration.

Upon admittance to the graduate program in English, the student should immediately arrange through the English Department Office to consult a graduate adviser on selecting courses and satisfying the department's M.A. Foreign Language Requirement (see "Foreign Language Requirement" in the "Degree Requirements" section).

All students except those who are "Classified or Conditionally Classified Graduate" students in English must have the written permission of an English graduate adviser to enroll in a graduate course in English.

"Classified Graduate" Status and Advancement to Candidacy

The student is normally admitted to the program in English as a "Conditionally Classified Graduate" student. One condition to his or her being a "Classified Graduate" is that (s)he pass ENGL 6001 with a grade of "A" or "B". Another is that the student must satisfy the University Writing Skills Requirement. There may be other conditions to his or her "Classified Graduate" status if (s)he has been admitted to the program with deficiencies; the student should consult with a graduate adviser to determine whether this is the case. After all conditions have been met, the student will be granted "Classified Graduate" status as a graduate student in English. To Advance to Candidacy for the M.A. in English, the student must satisfy the department's M.A. Foreign Language Requirement and complete 20 quarter-units of graduate coursework (including ENGL 6001) acceptable for the M.A. Also see admission requirements for the TESOL Option. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Degree Requirements

Students must complete, with a grade point average of 3.0 or better, 48 quarter-units of credit approved by a graduate adviser. At least 32 of these units must be in 6000-level courses (excluding ENGL 6900, ENGL 6909, and ENGL 6910) and must include ENGL 6001 (4 units); an additional FOUR 6000-level literature courses (one in American literature, one in British literature, two in literature before 1900) (16 units); and an additional THREE 6000-level courses in literature, creative writing, composition studies, or linguistics (12 units). The remaining 16 units may include ENGL 6910, University Thesis (a maximum of 4 thesis units may be counted for the degree), ENGL 6900 or ENGL 4900, Independent Study (a maximum of 4 independent study units may be counted for the degree), and 4000-level and/or 6000-level courses. (ENGL 6909 - Departmental Thesis, may NOT be used for the regular M.A. degree in English. It is the thesis specifically required in the M.A. TESOL degree option.)

The university thesis, ENGL 6910, is optional. Students may petition to take 1-4 units to write a thesis or equivalent work in fiction, poetry, drama, or non-fiction prose. (Note: Students who wish to submit a thesis for the degree must register for at least one unit of ENGL 6910.) Students who elect to submit a thesis must comply with the thesis instructions of the Department of English as well as those in the University Thesis Writing Guide available online at: www.csueastbay.edu/thesiswritingguide. Thesis proposals must be approved by two regular members of the English faculty, one as 'director' and one as 'second reader', before a thesis can be undertaken. Faculty members are not obliged to accept thesis proposals or to direct theses.

For those who elect to submit an approved thesis, ONE exit examination in a historical period of British and/or American literature or in composition studies is required. For those who do not elect to submit an approved thesis, TWO exit examinations in the areas named above are required. Students should consult a graduate adviser for details.

Foreign Language Requirement

Students must demonstrate a reading knowledge of a foreign language. Students should consult a graduate adviser for details. (American Sign Language may be used for the foreign language requirement, in which case, a year of college-level coursework is required.)

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement (UWSR). For information on meeting the University Writing Skills Requirement, see the Testing Office website at <http://www.csueastbay.edu/testing> or call 510.885.3661.

Applying for Graduation

A student must apply formally to graduate with a master's degree, by submitting a "Candidate for Degree" card during the Add period for the quarter before the one in which (s)he expects to graduate. Also during the quarter before the one in which the student expects to graduate, (s)he must ask the department's Graduate Coordinator to send a "Major Check" sheet to the Graduate Evaluations Office.

English, TESOL Option, M.A.

Admission

To be admitted to the M.A. in English with a Teaching English as a Second Language (TESOL) Option, students must hold a relevant baccalaureate degree (English, Linguistics, Speech Communication are obvious examples), with a 3.0 overall GPA, and have completed the following prerequisite courses (40 units) or their equivalents

- ENGL 3005 - Study of Language *Units: 4*
- ENGL 3010 - Modern English Grammar *Units: 4*

- ENGL 3015 - Introduction to Phonology *Units: 4*
or
- SPPA 3855 - Phonetics *Units: 4*

- ENGL 3020 - Advanced Expository Writing *Units: 4*
- ENGL 3040 - Linguistic History of the English Language *Units: 4*
- ENGL 4040 - Language in the U.S.A. *Units: 4*
- COMM 4830 - Intercultural Communication *Units: 4*

- ANTH 3800 - Language and Culture *Units: 4*
or
- HDEV 4520 - Language Acquisition and the Symbolic Function *Units: 4*

- Two courses in modern British or American literature *Units: 8*

Required Courses (45 units)

- ENGL 6501 - Theory and Practice of Teaching ESL I *Units: 4*
- ENGL 6502 - Theory and Practice of Teaching ESL II *Units: 4*
- ENGL 6503 - Second-Language Acquisition *Units: 4*
- ENGL 6504 - Morphology and Lexical Semantics *Units: 4*
- ENGL 6506 - Sociolinguistics *Units: 4*
- ENGL 6507 - Testing and Evaluation for Teaching ESL *Units: 4*

- ENGL 6508 - Supervised Tutoring/Teaching *Units: 4* (taken twice)
or
- ENGL 6508 - Supervised Tutoring/Teaching *Units: 4*
and
- ENGL 6510 - Pedagogical Grammar *Units: 4*

- ENGL 6509 - Computer Assisted Language Learning and Teaching *Units: 4*
- ENGL 6750 - Theory and Practice of Composition *Units: 4*
- ENGL 6909 - Departmental Thesis *Units: 1-5*

"Classified Graduate" Status and Advancement to Candidacy

Students are normally admitted to the master's program in English as "Conditionally Classified Graduate" students. Once the students have completed any outstanding prerequisite courses and have passed the Writing Skills Test, they may apply for "Classified Graduate" status. In order to advance to candidacy, students must have completed 24 units of graduate-level coursework with grades of "B" and higher.

Applying for Graduation

Students must apply formally to graduate with a master's degree by submitting a "Candidate for Degree" card during the Add/Drop period for the quarter before the one in which they expect to graduate. They must ask the English Department's Graduate Coordinator to send a "Major Check" sheet to the Graduate Evaluations Office.

Geography, M.A.

Program Description

Graduate study is offered leading to the degree of Master of Arts in Geography, with a broad range of potential specialties: cartography, environmental resource management, economic geography, regional planning, historical geography, geographic information systems (G.I.S.), physical geography, regional geography, and sustainable development. The seminars focus on intensive, directed readings interspersed with discussions of the content, principles, methods, and techniques of the selected topic or theme. The intent is to develop a subject to its research frontiers emphasizing an awareness of problems and their significance for the discipline. Seminars are accompanied or followed by directed research yielding oral and written reports. Their purpose is to expand beyond the recognition of problems to the guided investigation of a topic or theme. The seminars are supplemented by independent study and ultimately by research culminating in a University Thesis or a Departmental Thesis or a Project that allows and motivates the student to advance further in a chosen specialty. The candidate is responsible for the fulfillment of the specific requirements of the department stated below.

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter of this catalog. These requirements include the 32-unit residence requirement, the five-year rule on the currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills requirement.

Student Learning Outcomes

Students graduating with an M.A. in Geography from Cal State East Bay will be able to:

- demonstrate advanced written and oral communication skills;
- independently formulate and conduct thorough and insightful research using a range of literary tools, computer skills, and/or field methods;
- demonstrate advanced research skills leading to the completion of one or more mentored research projects or a research thesis;
- exhibit their substantial expertise concerning a particular geographic problem, process and/or region.

Admission

"Conditionally Classified Graduate" Status

Admission to this university in some category of post-baccalaureate status is the prerequisite for entry into the graduate program. Graduate courses in Geography are open to students who have completed the prerequisites and/or obtained the consent of the instructor. Credit may be given for equivalent courses taken at other accredited institutions; undergraduate deficiencies may be corrected while the student is in "Conditionally Classified Graduate" status.

A student must complete the following requirements to be admitted to the program with "Conditionally Classified Graduate" status:

- File the CSU "Graduate and Post-baccalaureate Application," which is available from CSUMentor. The student should also submit two copies each of transcripts from all universities or colleges attended. Students should contact department office to learn of additional support materials required for admission into the M.A. degree program in Geography.
- Have a 3.0 or higher GPA in all undergraduate work; and have a 3.3 or higher GPA in all upper division and graduate work in Geography prior to request for entry into the program.

Note: If a student has earned less than a 3.0 grade point average in all undergraduate work, or if (s)he has less than a 3.3 grade point average in upper division and graduate courses in Geography, (s)he must continue coursework in "Unclassified Post-baccalaureate" status until (s)he has removed the deficiencies and demonstrated his/her ability to meet the requirements of the graduate program.

- The Graduate Record Examination (GRE) Aptitude Test is not required, but students are strongly encouraged to take this test and submit their scores to the Geography Department prior to application for admission to the M.A. degree program in Geography.

"Classified Graduate" Status

A student must complete the following requirements to be admitted to the program with "Classified Graduate" status:

1. Complete the following undergraduate courses

Complete the following undergraduate courses or their equivalents, or demonstrate a competency by examination in:

- GEOG 3120 - Climate Change *Units: 4*
or
- GEOL 3110 - Principles of Geomorphology *Units: 4*
or
- GEOG 3115 - Physical Landscape Analysis *Units: 4*

- GEOG 3410 - Air-Photo Interpretation *Units: 4*
- GEOG 3600 - Cartographic Principles and Graphic Communication *Units: 4*
- GEOG 3480 - Applied Field Studies *Units: 4*
- GEOG 4000-level course on the growth of geographic thought, with consent of advisor *Units: 4*

Note:

Up to 10 units of undergraduate courses may be taken as electives applicable toward the 45 units for the M.A. degree.

2. File an intended program of study with the departmental Graduate Advisor

3. Complete the upper division course prerequisites

Complete the upper division course prerequisites for the seminars in the intended program of studies

4. Complete at least 12 quarter units

Complete at least 12 quarter units considered applicable by the department toward the M.A. degree requirements, including at least 3 quarter units of graduate-level (6000 series) work in residence at this university

5. Be recommended for "Classified Graduate" status by the department; and

6. Fulfill the University Writing Skills Requirement.

Maintenance of "Classified Graduate" Status

To maintain "Classified Graduate" status a student must maintain a 3.0 or higher GPA on all work taken in the approved program of study, whether at Cal State East Bay or at any other college or university. Only courses with grades of "C" and higher are acceptable for courses applicable to degree requirements in Geography.

If a candidate's GPA drops below 3.0, the department will notify the Graduate Dean to place the student in "Conditionally Classified Graduate" status and the university will place the student on Academic Probation until (s)he has remedied his or her deficiencies and has been recommended by the department for return to "Classified Graduate" status. Failure by a student to return to "Classified Graduate" status in two additional quarters of study (or following completion of 15 additional quarter units) shall result in his or her being academically disqualified from the departmental program.

Advancement to Candidacy

Admission to "Classified Graduate" status does not imply that a student will be Advanced to Candidacy for the M.A. degree. A student with "Classified Graduate" status will be Advanced to Candidacy for the M.A. degree when (s)he has satisfied the following requirements:

- Demonstrated proficiency in either a modern foreign language, or in statistical methods as they apply to geography, or in mathematics.
- Languages which are acceptable without special arrangements are Chinese, French, German, Japanese, Russian, Spanish, and Swedish. Any other modern foreign language may be substituted, provided the thesis advisor, the student, and the graduate advisor agree that the language is an integral part of the projected program of study for the M.A. degree.
"Proficiency" in a foreign language means the completion (with a grade point average of 2.5 or better) of two years of college-level instruction in the language or demonstrating, by written examination, a reading competency at this level.
- Statistical methods may be used to satisfy this requirement provided the thesis advisor, the student, and the graduate advisor agree that such methods form an integral part of the projected program of study for the M.A. degree.
"Proficiency" in statistical methods is defined as satisfactory completion of the equivalent of: STAT 1000 - Elements of Probability and Statistics and STAT 3010 - Statistical Methods in the Social Sciences, plus one 4000-level statistics course (STAT 4601 recommended). The student will also be required to demonstrate by examination the ability to solve a geographic problem using the computer.
- Mathematics may be used to satisfy this requirement provided the thesis advisor, the student, and the graduate advisor agree. "Proficiency" in mathematics is defined as satisfactory completion of the equivalent of Trigonometry and Analytic Geometry (MATH 1300); Calculus I, II, III (MATH 1304, MATH 1305, MATH 2304); and either Linear Algebra (MATH 2101) or one other upper division mathematics course, except MATH 4021, 4022, 4023.
- Declared an intention to complete either a thesis or a project.
- Been recommended for Advancement to Candidacy by the department.

Degree Requirements

To be eligible for the M.A. degree in Geography a student must:

1. have been Advanced to Candidacy
2. have completed 45 quarter units of graduate work of which:
 - a. all must have been earned within the five years just preceding the completion of the requirements for the degree
 - b. not fewer than 32 units must have been completed in residence
 - c. not fewer than 23 units

not fewer than 23 units must have been in geography courses in the 6000 series, including the thesis or project:

- d. not more than 6 units may have been for a University Thesis

not more than 6 units may have been for a University Thesis (GEOG 6910); nor more than 5 units for a Departmental Thesis (GEOG 6909); nor more than 4 for a project (GEOG 6899); and

- e. not more than 13 units

not more than 13 units may have been for extension and/or transfer course credit, as approved by the department;

3. have completed a satisfactory program of study as approved by the department, to include:

a. Seminar on Research Theory and Philosophy of Geography

- GEOG 6010 - Seminar on Research Theory and Philosophy of Geography *Units: 4*

b. four graduate seminars in geography (12)

Note:

GEOG 6900 - Independent Study may not be used to meet this requirement.

c. elective courses

elective courses (graduate or upper division) in geography taken as a graduate student (12-15)

d. elective courses

elective courses (graduate or upper division) outside of geography in one or more closely related fields (8-13)

Note:

A student with a baccalaureate degree in a closely related field may take these elective courses in geography.

e. a University Thesis or Departmental Thesis or Project (4-6)

4. have obtained a grade point average of 3.0 or higher in

- all post-baccalaureate units undertaken;
- all 45 units offered as satisfying the requirements of the M.A. degree program

5. have been recommended for the M.A. degree in Geography by the department.

6. have satisfied the University Writing Skills requirement

have satisfied the University Writing Skills requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Upper Division Courses Acceptable for the Master's Degree

All upper division Geography courses are acceptable for the M.A. degree program.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills requirement.

Geology, M.S.

Faculty: Research Interests

- Mitchell S. Craig, Ph.D., 1990, Georgia Institute of Technology; near surface geophysics, seismology, sedimentology
- Jean Moran, Ph.D., 1994, University of Rochester; hydrogeology, aqueous geochemistry, isotope hydrology
- Jeffery C. Seitz, Ph.D., 1994, Virginia Polytechnic Institute and State University; geochemistry, petrology, astrobiology, science education
- Luther M. Strayer, Ph.D., 1998, University of Minnesota, Minneapolis; structural geology, tectonics, Bay Area earthquake geology, field geology

Program Description

The Department of Earth and Environmental Sciences offers graduate study leading to the Master of Science degree in Geology. This program is designed to prepare students for:

- employment as geologists in government (city, county, regional, state, and federal) and private enterprise (engineering and geotechnical firms, mining and oil companies, etc.);
- research at the doctoral level in various aspects of geology, geochemistry, and geophysics depending on their undergraduate background; and
- the Community College Instructor Credential (the master's degree requirement). The department also provides continuing education for professional geologists, engineers, planners, etc.

To serve graduate students who are employed during the day, graduate courses in the Department of Earth and Environmental Sciences are offered in the evenings. In addition to regular catalog courses, graduate seminars address diverse subjects; recent seminars have focused on mineral deposits, earthquake hazards, sediment transport, and modern depositional environments. Opportunities exist for access to additional facilities and part-time employment at Lawrence Berkeley and Lawrence Livermore National Laboratories, and the U.S. Geological Survey in Menlo Park. Students registered at Cal State East Bay may enrich their graduate programs by enrolling in courses through cross-registration at the University of California, Berkeley.

Candidates for the M.S. degree must be prepared to engage in significant individual research. Recent student research in this department has included such topics as hydrogeology, near surface geophysics, areal geology and slope stability, geochemistry, structural geology, engineering geology, marine and geothermal geochemistry, neotectonics and marine sedimentology. Prospective candidates should determine whether their research interests coincide with those of the faculty members before applying to the program. Interested persons are invited to contact the department directly for more details on the program. Qualifications and advancement in the graduate program are decided by the department Graduate Coordinator with the concurrence of the department faculty.

Student Learning Outcomes

Students graduating with an M.S. in Geology from Cal State East Bay will be able to:

- conduct independent geologic research, including preparation of a project or thesis; the result should be of high enough quality to be presented at a professional meeting;
- write a technical report based on research carried out on behalf of an employer;
- evaluate reports written by other earth scientists, and to use written materials and data sets available from the library and Internet;
- communicate complex geological concepts.

Environmental Geology Option

Students who complete a combination of appropriate courses in the Department of Earth and Environmental Sciences and other departments and who complete an environmentally related thesis or project, will be allowed to receive the M.S. degree with the Environmental Geology Option. A list of appropriate courses for the option must be developed in consultation with the department faculty.

Admission

With the qualifications listed under "Conditionally Classified Graduate" status below, the M.S. degree program is open to any student in possession of a baccalaureate degree in Geology with coursework equivalent at least to the core requirements for the B.S. degree in Geology at Cal State East

Bay. Students who do not meet those requirements will be considered on an individual basis and accepted only after approval by a majority of regular faculty members.

Applicants must have a GPA of at least 2.5 in all undergraduate work and at least 2.75 in all geology courses. Any undergraduate geology course with a "D" grade will have to be repeated. Students transferring from another graduate program must have a GPA of at least 3.0 in all graduate geology courses. (No more than 13 units may be transferred.)

Applications must be accompanied by two letters of recommendation from faculty members or work supervisors.

Conditionally Classified Graduate Status

Students who are otherwise qualified but have course deficiencies and/or have not satisfied the University Writing Skills requirement, will be accepted as "Conditionally Classified Graduate" students. Course deficiencies may be removed by enrolling on a "CR/NC" basis. (Students who wish to develop their writing skills should enroll in ENGL 3000 or ENGL 3001.)

Classified Graduate Status

Students who fulfill all the requirements for admission to the program will be accorded "Classified Graduate" status once they have satisfied the University Writing Skills requirement. All deficiencies have to be removed, and the University Writing Skills requirement satisfied no later than the completion of 20 units of coursework applicable to the degree or the student will be disqualified.

Selection of Thesis/Project or Academic Advisor

Once "Classified Graduate" status has been attained, each student will be assigned a thesis or project advisor by the department chair after consultation with the student and the graduate coordinator. The faculty member chosen also will act as academic advisor.

Advancement to Candidacy

In order to be Advanced to Candidacy, the student must have:

- been accorded "Classified Graduate" status
- been assigned a thesis or graduate project advisor; and
- submitted to the department an acceptable Thesis or graduate Project Prospectus describing the thesis research or graduate project work to be attempted (guidelines for preparation of the Prospectus may be obtained from the department office). The research topic must be approved in advance by the advisor.

Degree Requirements

1. Advancement to Candidacy

2. Satisfaction of university requirements

Satisfaction of university requirements described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

3. Completion of the study plan outlined below (45 units)

- Two Graduate Seminars GEOL 6811 - Graduate Seminar *Units: 2*
- GEOL 6910 - University Thesis *Units: 1-9*

or

- GEOL 6899 - Project *Units: 1-2*
- Geology Graduate Courses *Units: 20-27*
- Upper division/graduate electives in Geology and related fields *Units: 12*

4. Completion and defense of the University Thesis

Completion and defense of the University Thesis or completion (and defense, if required) of the graduate Project.

Curricular Requirements

A. Graduate Geology Course Requirements

All students are required to take two graduate seminars

- GEOL 6811 - Graduate Seminar *Units: 2 (x 2 for a total of 4 units).*

In addition, any combination of graduate geology courses and additional seminars except

- GEOL 6420 - Internship *Units: 1-4*
- GEOL 6900 - Independent Study *Units: 1-4*
- GEOL 6910 - University Thesis *Units: 1-9*
- GEOL 6899 - Project *Units: 1-2*

must be taken for a total of 20-27 units.

B. Elective Course Requirement

Twelve units must be completed in courses selected from a list of approved upper division and graduate courses in Geology and related disciplines which is available from the department office; at least 4 units must be in Geology courses.

C. Basic University Requirement

These include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills requirement.

Students cannot receive credit toward the master's degree for:

- Courses taken to remove deficiencies
- GEOL 6900 - Independent Study *Units: 1-4* in excess of 4 units
- GEOL 6420 - Internship *Units: 1-4* in excess of 4 units
- GEOL 6910 - University Thesis *Units: 1-9* in excess of 9 units
- or*
- GEOL 6899 - Project *Units: 1-2* in excess of 2 units.
- GEOL 3898 - Cooperative Education *Units: 1-4*

University Thesis

Requirements: Students must submit to the Thesis Committee, and defend orally, an acceptable University Thesis. The University Thesis is a formal paper reporting the results of original research. This research normally involves field and/or laboratory investigation. The thesis is submitted to the university in the bound format specified in the "University Thesis Writing Guide," www.csueastbay.edu/thesiswritingguide. A minimum of two

copies of the thesis must be submitted to the Thesis Office (Academic Programs and Graduate Studies, Student Services and Administration Building, Suite 4500); one copy will be filed in the Department Office. The Thesis Committee comprises the faculty thesis advisor plus either (1) two other faculty members from the Department of Earth and Environmental Sciences or other appropriate Cal State East Bay faculty, or (2) one other faculty member from the department and one or more qualified individuals from outside the university.

Units Required: GEOL 6910 - University Thesis, for a total of 9 units; students may not register for more than 50% of the total units prior to starting the writing of their thesis.

Graduate Project

Requirements: Project students must submit to the department an abstract and acceptable graduate project (manuscript, map, computer model, education module). An oral defense may be required.

Units Required: GEOL 6899 - Project, for a total of 1-2 units.

Other Requirements

Students filing for graduation are expected to know the procedures described in this catalog. (See "Apply for Graduation " in the Baccalaureate Degree Information chapter.)

Health Care Administration, M.S.

Program Description

The M.S. in Health Care Administration (MS-HCA) program has been designed to provide working health care professionals with the knowledge, skill sets, and abilities needed to be effective health care administrators and managers. Health care delivery is undergoing rapid growth and change in the United States and around the world, a change that has accelerated in the 21st century. As a result, the responsibilities of health care administrators and managers are continuously being redefined. In this dynamic environment, organizations must manage for continuous improvement and maintain flexibility to respond to the latest challenges. This underscores the constant need for health care professionals to keep pace with new knowledge and gain new skills.

The MS-HCA program seeks to develop professionals who understand how to manage non-profit, for-profit, and voluntary health care organizations in effective and innovative ways and who can help health care organizations successfully meet the challenges of a rapidly changing environment. Students in the MS-HCA program acquire the analytical skills needed to explore new models of health care delivery and organizational design. They also develop the leadership skills needed to discover and implement creative solutions to problems in the current health care system.

Student Learning Outcomes

The Health Care Leadership Alliance (HLA), a consortium of major professional health care associations, has identified five competency domains in which all health care administrators and managers should have proficiency for workplace effectiveness: communication and relationship management, leadership, professionalism, knowledge of the health care environment, and business skills and knowledge. The MSHCA program has adopted these five competency domains as its program learning outcomes.

Students who graduate with an M.S. in Health Care Administration will be able to:

- Communicate clearly and concisely with internal and external customers, to establish and maintain relationships, and to facilitate constructive interactions with individuals and groups
- Inspire individual and organizational excellence, to create and attain a shared vision, and to successfully manage change to attain the organization's strategic ends and successful performance
- Align personal and organizational conduct with ethical and professional standards that include a responsibility to the patient and community, a service orientation, and a commitment to lifelong learning and improvement
- Demonstrate an understanding of the health care system and the environment in which health care managers and providers function
- Apply business principles to the health care environment; basic business principles include financial management, human resource management, organizational dynamics and governance, strategic planning and marketing, information management, risk management, and quality improvement

Career Opportunities

The need for health services managers and administrators is growing nationally and even more so in California. According to the US Department of Labor, health care is one of the largest industries in the US, and the second largest employer, with more than 11 million jobs. According to the Centers for Medicare & Medicaid Services (CMS), the average annual health spending growth (6.1%) is anticipated to outpace average annual growth in the overall economy (4.4%) for the projection period of 2009-2019. By 2019, national health spending is expected to reach \$4.5 trillion and comprise 19.3% of GDP.

While clinical care personnel are the frontline of the US health care system, health services managers and administrators play a significant role. They plan, direct, coordinate, and supervise medicine and health services in hospitals, clinics, managed care organizations, public health agencies, and other health care organizations. According to the Department of Labor's Occupational Outlook Handbook, employment in this field is expected to increase 22% from 2010 to 2020, faster than the average for all occupations, with a projected need of 99,400 additional positions and an estimated median annual wage of \$80,200. According to the California Employment Development Department (EDD), the projected growth in California is 18% for the projection period of 2006-2016, with an estimated median annual wage of \$95,168. A master's degree in health care administration, public health, health services management, or a similar degree is the standard credential for most positions in this field.

Special Features

The MS-HCA is designed for working adults and courses generally meet one night per week. No more than two courses per quarter may be completed in the MS-HCA program. Courses are offered in all quarters, including the summer quarter. Most, but not all, of the courses are offered in a hybrid format where the majority of the course sessions are in-person and some are fully online. Students are admitted as a cohort and follow a degree completion roadmap designed for that cohort.

Admission

The MS-HCA degree program is open to applicants planning a career or advancing a career in the health care field who have a baccalaureate degree from an accredited institution. Admission will be granted based upon the Admission Committee's overall assessment of the student's qualifications and academic/career potential, using the following criteria:

- Cumulative undergraduate GPA of at least 2.5;
- Statement of Purpose in pursuing the MS-HCA degree (a 1-2 page essay double-spaced, explaining who you are, your career goals and how the MS-HCA degree will help you achieve those goals, and why you believe you will be successful in the program);
- Two letters of academic and/or professional recommendation (on letterhead). The letter writers should include how they know you, if they think you would be successful in the program and why they think that;
- Professional resume/vita;
- All undergraduate/graduate transcripts. (These must be sent directly to University Admissions NOT the Department.)

All applicants must submit an online Graduate Admission application declaring Health Care Administration as a degree objective, and transcripts, at <http://www.csumentor.edu> along with a non-refundable fee. In addition, applicants must also submit a statement of purpose, 2 letters of reference and a resume directly to the Department of Public Affairs and Administration at CSUEB, Dept of Public Affairs and Administration, 25800 Carlos Bee Blvd., MI 4122, Hayward, CA 94542-3040.

Please review the detailed application instructions on the Department's website at <http://www20.csueastbay.edu/class/departments/publicadmin/healthcare/index.html>

Student Standing and Progress toward the Degree

There are three categories of student status, which reflect student progress toward the degree: "Conditionally Classified Graduate" student, "Classified Graduate" student, and Advancement to Candidacy.

- Students achieve "Conditionally Classified Graduate" status when they have been admitted to the MS-HCA program, but have not yet completed the prerequisites for the "Classified Graduate" status in the MS-HCA program.
- Students achieve "Classified Graduate" status when they have satisfactorily completed the foundation course for the MS-HCA program or its equivalent, and satisfied the University Writing Skills requirement. (See "Prerequisites for "Classified Graduate" status below.)
- Students are Advanced to Candidacy when they have completed the core courses with a 3.0 or better cumulative GPA.

Prerequisites for "Classified Graduate" Status

As prerequisites to "Classified Graduate" status, students must satisfy the University Writing Skills Requirement and satisfactorily complete the foundation course:

- STAT 1000 - Elements of Probability and Statistics *Units: 5* or its equivalent (with a grade of "C" or better) or request to have the foundation course waived based upon other coursework completed in statistics.

For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Degree Requirements

The MS-HCA program requires completion of 48 quarter units consisting of required core courses and the capstone experience. Of the 48 units, at least 35 units must be completed in residence (transfer units are limited to 13 quarter units). No course numbered 1000 to 2999 (or the equivalent, if taken elsewhere) may be used as part of the 48-unit graduate degree program. STAT 1000 - Elements of Probability and Statistics, or its equivalent, must be completed as a foundation course with a grade of "C" or better prior to enrolling in 6000-level courses. Transfer units are rarely accepted in the MS-HCA program.

A cumulative grade point average of 3.0 must be maintained in all 48 quarter units taken to satisfy the degree requirements. Students who fail to maintain progress by falling below a 3.0 GPA in their graduate courses for two consecutive quarters will be academically disqualified by the university. All graduate degree requirements must be completed within five years.

Students accumulating more than 8 units of work graded "I" may not register for courses applicable to the degree until the "I" grades are removed.

Curricular Requirements (48 units)

1. Foundation Course

Students must complete the foundation course with a grade of "C" or better.

- STAT 1000 - Elements of Probability and Statistics *Units: 5* or its equivalent

2. Required Core Courses (28 units)

- HCA 6200 - US Health Care System *Units: 4*
- HCA 6225 - Organization Theory and Behavior in Health Care *Units: 4*
or
- HCA 6202 - Project and Change Management in Health Informatics *Units: 4*
- HCA 6230 - Information Technology in Health Care *Units: 4*
or
- HCA 6201 - Introduction to Health Informatics *Units: 4*
- HCA 6240 - Health Care Financing and Budgeting *Units: 4*
- HCA 6260 - Health Care Policy Analysis *Units: 4*
- HCA 6275 - Evolution of Managed Health Care *Units: 4*
- HCA 6290 - Health Care Quality Assessment and Improvement *Units: 4*
or
- HCA 6203 - Quality Improvement Using Health Informatics *Units: 4*

3. Option

Management and Change in Health Care (16 units)

- HCA 6210 - Leadership and Change in Health Care Organizations *Units: 4*
- HCA 6250 - Strategic Management of Health Care Organizations *Units: 4*
- HCA 6270 - Health Care Management *Units: 4*
- HCA 6280 - Legal and Ethical Issues in Health Care *Units: 4*

4. Capstone Experience (4 units)

- HCA 6899 - Project *Units: 4*

Capstone Experience

HCA 6899 - Project 4 serves as the capstone experience in the degree program. HCA 6899 must be taken as the last 4 units in the program. Students must satisfy the University Writing Skills Test requirement before they will be allowed to enroll in HCA 6899. A project has a strong practical action-oriented component accompanied by a written document. A project is directed by one faculty member.

Grades of "RP" (Report in Progress) may be given for a project that is not completed at the end of the quarter. The "RP" grade indicates that work is in progress, but that a final grade cannot be assigned until additional work is completed. The "RP" grade must be removed within four quarters or it will become an "F".

Granting the Degree

Upon satisfaction of all requirements for the degree, the department will recommend that the candidate be granted the Master of Science Degree in Health Care Administration. Students must file for graduation by the second week of the quarter prior to the quarter in which they expect to graduate.

History, Generalist Option, M.A.

Program Description

The Master of Arts degree in History is designed to meet the varied needs and interests of students seeking an advanced degree in history. The program educates students in advanced skills in historical research, writing, interpretation and research, and provides opportunities for training in teaching and public history. Four options permit students to plan their coursework to best suit their goals within the overall program requirements and the range of courses offered.

The program includes graduate course offerings in historical research and historiography, conference (seminar) courses, undergraduate or graduate elective units, and a culminating master's project. Elective units may be taken in other fields with the approval of the graduate coordinator. The master's project may be a university thesis, examinations in major and minor fields, a public history project or a graduate teaching project, depending on the option chosen.

Because the majority of students in the master's program are employed full-time during the day, graduate courses are offered in the evening, usually on a one-night-a-week basis, in fall, winter, and spring quarters. This schedule allows students time to complete regular assignments, carry on research, and make regular progress toward the M.A. degree.

Student Learning Outcomes

Students graduating with an M.A. in History from Cal State East Bay will be able to:

- possess advanced knowledge of United States history and the history of at least one other geographical region;
- understand major arguments and themes in contemporary historiography, cross-cultural and interdisciplinary approaches to historical study, and humanistic values;
- demonstrate familiarity with Bay Area research libraries, archives, special collections, and digital sources;
- possess advanced writing and interpretive skills for analyzing both secondary and primary sources, and demonstrate advanced research abilities;
- complete a major independent project in history;

- observe the standards of academic integrity and attribution of sources, and practice the values of the historical profession, including ethics and standards for work in research libraries, on the Internet, at professional conferences, and at interviews for employment.

Career Opportunities

The master's program is especially suited to individuals interested in enhancing their careers as secondary school teachers, in qualifying as community college faculty, or training as historical editors, archivists, museum professionals and Bay Area or California historians. It is also useful for individuals interested in retraining for careers in history or in preparing for doctoral programs in history.

Faculty

Although most graduate students find it convenient to specialize in American and California history, the History Department faculty also includes specialists in European, Asian, and Latin American history. Qualified graduate students may usually carry out research and specialize in these areas as well. The full-time faculty are professional scholars, widely published in their respective fields and active in regional and national historical associations. The department has many years' experience in advising and training master's students in history.

Option Areas

All History graduate students may complete their degrees with culminating examinations in a major and a minor field, selected in consultation with their graduate committees. Students may also choose one of three other options: Teaching, Public History, or University Thesis. These options are distinguished chiefly by their capstone projects, but the Teaching and Public History options also include courses especially designed for the field. Students must apply to the department for permission to complete their programs in any of the three options.

HIST 6010 and 6030

All graduate students are required to take HIST 6010 - Seminar in History, and HIST 6030 - Graduate Historiography. These two important seminars provide students with first-hand experience in primary source research in Bay Area collections and libraries and on the Internet, and with advanced knowledge of trends in the study of historical interpretation and writing, cross-cultural and interdisciplinary approaches to history, humanistic values in history and ethical standards. Students are urged to take these two courses in their first year of graduate study. Proficiency in information literacy is required for each course.

Distinctive Features

Research opportunities in Bay Area and California history abound at the University of California, Berkeley; the Bancroft Library; the National Archives at San Bruno; and numerous private collections in the region. The University Library provides excellent reference, Internet, and interlibrary loan services and contains substantial print and microfilm holdings.

Internships

History graduate students are encouraged to gain experience in applied history through internships at historical agencies in the Bay Area, depending on availability. Internships, like all formal appointments, entail an application process and interview. Internships are nearly always non-paying, but all graduate students are eligible to enroll in up to 4 units of HIST 6901 - Internship in Public History, as a substitution for an elective in the program (see Degree Requirements below).

Readerships

Pending annual funding, students may also acquire experience in lower-division teaching through paid Readerships, upon application to the History Department.

Scholarships

Qualified history graduate students are eligible for graduate financial aid through the loan and fellowship programs administered by the Financial Aid Office. Small scholarships, pending available funds, are awarded annually to assist graduate students in completing their master's projects.

Admission

Admission to the master's program generally requires a B.A. degree major in History, or the equivalent, and a minimum GPA of 3.0 ("B") in the last two years of undergraduate work and 3.25 ("B+") in history. A one-page statement of purpose, a writing sample, and two letters of recommendation must accompany applications. In addition, applicants must submit their scores on the Graduate Record Exam (GRE) to the History Department office. Interested students with degrees in related disciplines, such as American Studies, Ethnic Studies, Political Science, Art or Theater History, and Literature, and suitable academic backgrounds in history are encouraged to apply but will be required to complete prerequisite coursework in history.

Students without necessary background in research or writing may also be admitted to the program as "Conditionally Classified Graduate" students with the requirement that they complete HIST 4030 and/or HIST 4031 at a specified grade level before being admitted to "Classified Graduate" status. Students meeting all admissions requirements, and who have satisfied the University Writing Skills Requirement, are eligible to be admitted as "Classified Graduate" students. Applicants should consult with the History Graduate Coordinator for advising. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Degree Requirements

The Master of Arts degree in History consists of 45 units. Each of the four options in the master's program requires a prescribed program of 45 units listed below. Reading proficiency in a foreign language is strongly encouraged, especially for those planning to pursue doctoral degrees or research careers.

I. Core Courses (13 units)

- HIST 6010 - Seminar in History *Units: 5*
- HIST 6030 - Graduate Historiography *Units: 4*
- HIST 6050 - History Graduate Portfolio *Units: 4*

II. Conference Courses (12-16 units)

Complete three to four conference courses, depending on choice of option (below) in at least two different areas. Students taking University Thesis must complete one conference course in the general area of the thesis topic. The same course number may be taken more than once if the content is significantly different. Conference courses are as follows:

- HIST 6100 - Conference Course in Ancient and Medieval History *Units: 4*
- HIST 6200 - Conference Course in European History *Units: 4*
- HIST 6300 - Conference Course in Asian and Middle Eastern History *Units: 4*
- HIST 6400 - Conference Course in United States History *Units: 4*

III. Electives (8-12)

Eight (8) to twelve (12) units of upper division or graduate courses in History, depending on choice of option. Students in the Public History Option may select, with the approval of the Public History and Internship Coordinator and the Graduate Coordinator, courses in other disciplines specific to their professional goals. All students may substitute HIST 6901 - Internship in Public History and/or HIST 6900 - Independent Study for 4-8 units of electives, with approval of the Graduate Coordinator.

IV. Option Courses (4-12 units)

Students must select one of the options outlined below. Students are required to consult with the Graduate Coordinator regarding the selection of their conference courses and electives above, and for guidance in obtaining required approval for their chosen capstone project.

A. Generalist Option

Capstone Experience: Comprehensive Examination.

Must take HIST 6905 *I-4* under the guidance of two faculty mentors and pass comprehensive examinations in major and minor fields as prescribed by the department. Option requires sixteen (16) units of Conference Courses and twelve (12) units of Electives.

Upper Division Courses Acceptable for the Master's Degree

All History courses in the 3000-4000 series except HIST 3400, HIST 4030, and HIST 4031 are acceptable courses in a master's program.

Advancement to Candidacy

In addition students must meet the requirements of Advancement to Candidacy confirming that a student is prepared to finish the degree and is recommended as a degree candidate. A Classified Graduate student in good standing is eligible to be advanced to candidacy for the master's degree after:

- completing 12 quarter units applicable to the degree program
- completing HIST 6010 and HIST 6030
- submitting a proposal for the Master's thesis, project, or two fields of examination to the Graduate Committee
- obtaining the Graduate Coordinator's approval of the student's committee, comprised of at least two faculty members.

History, Public History Option, M.A.

Program Description

The Master of Arts degree in History is designed to meet the varied needs and interests of students seeking an advanced degree in history. The program educates students in advanced skills in historical research, writing, interpretation and research, and provides opportunities for training in teaching and public history. Four options permit students to plan their coursework to best suit their goals within the overall program requirements and the range of courses offered.

The program includes graduate course offerings in historical research and historiography, conference (seminar) courses, undergraduate or graduate elective units, and a culminating master's project. Elective units may be taken in other fields with the approval of the graduate coordinator. The master's project may be a university thesis, examinations in major and minor fields, a public history project or a graduate teaching project, depending on the option chosen.

Because the majority of students in the master's program are employed full-time during the day, graduate courses are offered in the evening, usually on a one-night-a-week basis, in fall, winter, and spring quarters. This schedule allows students time to complete regular assignments, carry on research, and make regular progress toward the M.A. degree.

Student Learning Outcomes

Students graduating with an M.A. in History from Cal State East Bay will be able to:

- possess advanced knowledge of United States history and the history of at least one other geographical region;
- understand major arguments and themes in contemporary historiography, cross-cultural and interdisciplinary approaches to historical study, and humanistic values;
- demonstrate familiarity with Bay Area research libraries, archives, special collections, and digital sources;
- possess advanced writing and interpretive skills for analyzing both secondary and primary sources, and demonstrate advanced research abilities;
- complete a major independent project in history;
- observe the standards of academic integrity and attribution of sources, and practice the values of the historical profession, including ethics and standards for work in research libraries, on the Internet, at professional conferences, and at interviews for employment.

Career Opportunities

The master's program is especially suited to individuals interested in enhancing their careers as secondary school teachers, in qualifying as community college faculty, or training as historical editors, archivists, museum professionals and Bay Area or California historians. It is also useful for individuals interested in retraining for careers in history or in preparing for doctoral programs in history.

Faculty

Although most graduate students find it convenient to specialize in American and California history, the History Department faculty also includes specialists in European, Asian, and Latin American history. Qualified graduate students may usually carry out research and specialize in these areas as well. The full-time faculty are professional scholars, widely published in their respective fields and active in regional and national historical associations. The department has many years' experience in advising and training master's students in history.

Option Areas

All History graduate students may complete their degrees with culminating examinations in a major and a minor field, selected in consultation with their graduate committees. Students may also choose one of three other options: Teaching, Public History, or University Thesis. These options are distinguished chiefly by their capstone projects, but the Teaching and Public History options also include courses especially designed for the field. Students must apply to the department for permission to complete their programs in any of the three options.

HIST 6010 and 6030

All graduate students are required to take HIST 6010 - Seminar in History, and HIST 6030 - Graduate Historiography. These two important seminars provide students with first-hand experience in primary source research in Bay Area collections and libraries and on the Internet, and with advanced knowledge of trends in the study of historical interpretation and writing, cross-cultural and interdisciplinary approaches to history, humanistic values in history and ethical standards. Students are urged to take these two courses in their first year of graduate study. Proficiency in information literacy is required for each course.

Distinctive Features

Research opportunities in Bay Area and California history abound at the University of California, Berkeley; the Bancroft Library; the National Archives at San Bruno; and numerous private collections in the region. The University Library provides excellent reference, Internet, and interlibrary loan services and contains substantial print and microfilm holdings.

Internships

History graduate students are encouraged to gain experience in applied history through internships at historical agencies in the Bay Area, depending on availability. Internships, like all formal appointments, entail an application process and interview. Internships are nearly always non-paying, but all graduate students are eligible to enroll in up to 4 units of HIST 6901 - Internship in Public History, as a substitution for an elective in the program (see Degree Requirements below).

Readerships

Pending annual funding, students may also acquire experience in lower-division teaching through paid Readerships, upon application to the History Department.

Scholarships

Qualified history graduate students are eligible for graduate financial aid through the loan and fellowship programs administered by the Financial Aid Office. Small scholarships, pending available funds, are awarded annually to assist graduate students in completing their master's projects.

Admission

Admission to the master's program generally requires a B.A. degree major in History, or the equivalent, and a minimum GPA of 3.0 ("B") in the last two years of undergraduate work and 3.25 ("B+") in history. A one-page statement of purpose, a writing sample, and two letters of recommendation must accompany applications. In addition, applicants must submit their scores on the Graduate Record Exam (GRE) to the History Department office. Interested students with degrees in related disciplines, such as American Studies, Ethnic Studies, Political Science, Art or Theater History, and Literature, and suitable academic backgrounds in history are encouraged to apply but will be required to complete prerequisite coursework in history.

Students without necessary background in research or writing may also be admitted to the program as "Conditionally Classified Graduate" students with the requirement that they complete HIST 4030 and/or HIST 4031 at a specified grade level before being admitted to "Classified Graduate" status. Students meeting all admissions requirements, and who have satisfied the University Writing Skills Requirement, are eligible to be admitted as "Classified Graduate" students. Applicants should consult with the History Graduate Coordinator for advising. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Degree Requirements

The Master of Arts degree in History consists of 45 units. Each of the four options in the master's program requires a prescribed program of 45 units listed below. Reading proficiency in a foreign language is strongly encouraged, especially for those planning to pursue doctoral degrees or research careers.

I. Core Courses (13 units)

- HIST 6010 - Seminar in History *Units: 5*
- HIST 6030 - Graduate Historiography *Units: 4*
- HIST 6050 - History Graduate Portfolio *Units: 4*

II. Conference Courses (12-16 units)

Complete three to four conference courses, depending on choice of option (below) in at least two different areas. Students taking University Thesis must complete one conference course in the general area of the thesis topic. The same course number may be taken more than once if the content is significantly different. Conference courses are as follows:

- HIST 6100 - Conference Course in Ancient and Medieval History *Units: 4*
- HIST 6200 - Conference Course in European History *Units: 4*
- HIST 6300 - Conference Course in Asian and Middle Eastern History *Units: 4*
- HIST 6400 - Conference Course in United States History *Units: 4*

III. Electives (8-12)

Eight (8) to twelve (12) units of upper division or graduate courses in History, depending on choice of option. Students in the Public History Option may select, with the approval of the Public History and Internship Coordinator and the Graduate Coordinator, courses in other disciplines specific to their professional goals. All students may substitute HIST 6901 - Internship in Public History and/or HIST 6900 - Independent Study for 4-8 units of electives, with approval of the Graduate Coordinator.

IV. Option Courses (4-12 units)

Students must select one of the options outlined below. Students are required to consult with the Graduate Coordinator regarding the selection of their conference courses and electives above, and for guidance in obtaining required approval for their chosen capstone project.

C. Public History Option

Required courses:

- HIST 4032 - Introduction to Public History *Units: 4* or approved alternative
- HIST 6901 - Internship in Public History *Units: 1-5*

Capstone Experience:

- HIST 6899 - Project *Units: 1-4* under supervision of faculty mentor.

Option requires

Option requires twelve (12) units of Conference Courses and eight (8) units of Electives.

Upper Division Courses Acceptable for the Master's Degree

All History courses in the 3000-4000 series except HIST 3400, HIST 4030, and HIST 4031 are acceptable courses in a master's program.

Advancement to Candidacy

In addition students must meet the requirements of Advancement to Candidacy confirming that a student is prepared to finish the degree and is recommended as a degree candidate. A Classified Graduate student in good standing is eligible to be advanced to candidacy for the master's degree after:

- completing 12 quarter units applicable to the degree program
- completing HIST 6010 and HIST 6030
- submitting a proposal for the Master's thesis, project, or two fields of examination to the Graduate Committee
- obtaining the Graduate Coordinator's approval of the student's committee, comprised of at least two faculty members.

History, Teaching Option, M.A.

Program Description

The Master of Arts degree in History is designed to meet the varied needs and interests of students seeking an advanced degree in history. The program educates students in advanced skills in historical research, writing, interpretation and research, and provides opportunities for training in teaching and public history. Four options permit students to plan their coursework to best suit their goals within the overall program requirements and the range of courses offered.

The program includes graduate course offerings in historical research and historiography, conference (seminar) courses, undergraduate or graduate elective units, and a culminating master's project. Elective units may be taken in other fields with the approval of the graduate coordinator. The master's project may be a university thesis, examinations in major and minor fields, a public history project or a graduate teaching project, depending on the option chosen.

Because the majority of students in the master's program are employed full-time during the day, graduate courses are offered in the evening, usually on a one-night-a-week basis, in fall, winter, and spring quarters. This schedule allows students time to complete regular assignments, carry on research, and make regular progress toward the M.A. degree.

Student Learning Outcomes

Students graduating with an M.A. in History from Cal State East Bay will be able to:

- possess advanced knowledge of United States history and the history of at least one other geographical region;
- understand major arguments and themes in contemporary historiography, cross-cultural and interdisciplinary approaches to historical study, and humanistic values;
- demonstrate familiarity with Bay Area research libraries, archives, special collections, and digital sources;
- possess advanced writing and interpretive skills for analyzing both secondary and primary sources, and demonstrate advanced research abilities;
- complete a major independent project in history;
- observe the standards of academic integrity and attribution of sources, and practice the values of the historical profession, including ethics and standards for work in research libraries, on the Internet, at professional conferences, and at interviews for employment.

Career Opportunities

The master's program is especially suited to individuals interested in enhancing their careers as secondary school teachers, in qualifying as community college faculty, or training as historical editors, archivists, museum professionals and Bay Area or California historians. It is also useful for individuals interested in retraining for careers in history or in preparing for doctoral programs in history.

Faculty

Although most graduate students find it convenient to specialize in American and California history, the History Department faculty also includes specialists in European, Asian, and Latin American history. Qualified graduate students may usually carry out research and specialize in these areas as well. The full-time faculty are professional scholars, widely published in their respective fields and active in regional and national historical associations. The department has many years' experience in advising and training master's students in history.

Option Areas

All History graduate students may complete their degrees with culminating examinations in a major and a minor field, selected in consultation with their graduate committees. Students may also choose one of three other options: Teaching, Public History, or University Thesis. These options are distinguished chiefly by their capstone projects, but the Teaching and Public History options also include courses especially designed for the field. Students must apply to the department for permission to complete their programs in any of the three options.

HIST 6010 and 6030

All graduate students are required to take HIST 6010 - Seminar in History, and HIST 6030 - Graduate Historiography. These two important seminars provide students with first-hand experience in primary source research in Bay Area collections and libraries and on the Internet, and with advanced knowledge of trends in the study of historical interpretation and writing, cross-cultural and interdisciplinary approaches to history, humanistic values in history and ethical standards. Students are urged to take these two courses in their first year of graduate study. Proficiency in information literacy is required for each course.

Distinctive Features

Research opportunities in Bay Area and California history abound at the University of California, Berkeley; the Bancroft Library; the National Archives at San Bruno; and numerous private collections in the region. The University Library provides excellent reference, Internet, and interlibrary loan services and contains substantial print and microfilm holdings.

Internships

History graduate students are encouraged to gain experience in applied history through internships at historical agencies in the Bay Area, depending on availability. Internships, like all formal appointments, entail an application process and interview. Internships are nearly always non-paying, but all graduate students are eligible to enroll in up to 4 units of HIST 6901 - Internship in Public History, as a substitution for an elective in the program (see Degree Requirements below).

Readerships

Pending annual funding, students may also acquire experience in lower-division teaching through paid Readerships, upon application to the History Department.

Scholarships

Qualified history graduate students are eligible for graduate financial aid through the loan and fellowship programs administered by the Financial Aid Office. Small scholarships, pending available funds, are awarded annually to assist graduate students in completing their master's projects.

Admission

Admission to the master's program generally requires a B.A. degree major in History, or the equivalent, and a minimum GPA of 3.0 ("B") in the last two years of undergraduate work and 3.25 ("B+") in history. A one-page statement of purpose, a writing sample, and two letters of recommendation must accompany applications. In addition, applicants must submit their scores on the Graduate Record Exam (GRE) to the History Department office. Interested students with degrees in related disciplines, such as American Studies, Ethnic Studies, Political Science, Art or Theater History, and Literature, and suitable academic backgrounds in history are encouraged to apply but will be required to complete prerequisite coursework in history.

Students without necessary background in research or writing may also be admitted to the program as "Conditionally Classified Graduate" students with the requirement that they complete HIST 4030 and/or HIST 4031 at a specified grade level before being admitted to "Classified Graduate" status. Students meeting all admissions requirements, and who have satisfied the University Writing Skills Requirement, are eligible to be admitted as "Classified Graduate" students. Applicants should consult with the History Graduate Coordinator for advising. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Degree Requirements

The Master of Arts degree in History consists of 45 units. Each of the four options in the master's program requires a prescribed program of 45 units listed below. Reading proficiency in a foreign language is strongly encouraged, especially for those planning to pursue doctoral degrees or research careers.

I. Core Courses (13 units)

- HIST 6010 - Seminar in History *Units: 5*
- HIST 6030 - Graduate Historiography *Units: 4*
- HIST 6050 - History Graduate Portfolio *Units: 4*

II. Conference Courses (12-16 units)

Complete three to four conference courses, depending on choice of option (below) in at least two different areas. Students taking University Thesis must complete one conference course in the general area of the thesis topic. The same course number may be taken more than once if the content is significantly different. Conference courses are as follows:

- HIST 6100 - Conference Course in Ancient and Medieval History *Units: 4*
- HIST 6200 - Conference Course in European History *Units: 4*
- HIST 6300 - Conference Course in Asian and Middle Eastern History *Units: 4*
- HIST 6400 - Conference Course in United States History *Units: 4*

III. Electives (8-12)

Eight (8) to twelve (12) units of upper division or graduate courses in History, depending on choice of option. Students in the Public History Option may select, with the approval of the Public History and Internship Coordinator and the Graduate Coordinator, courses in other disciplines specific to their professional goals. All students may substitute HIST 6901 - Internship in Public History and/or HIST 6900 - Independent Study for 4-8 units of electives, with approval of the Graduate Coordinator.

IV. Option Courses (4-12 units)

Students must select one of the options outlined below. Students are required to consult with the Graduate Coordinator regarding the selection of their conference courses and electives above, and for guidance in obtaining required approval for their chosen capstone project.

D. Teaching Option

Required course (4 units)

- HIST 4033 - Introduction to Teaching History *Units: 4*

Capstone Experience (8 units)

- HIST 6900 - Independent Study *Units: 1-4*
- HIST 6899 - Project *Units: 1-4* under supervision of faculty mentor.

Option requires

Option requires twelve (12) units of Conference Courses and eight (8) units of Electives.

Upper Division Courses Acceptable for the Master's Degree

All History courses in the 3000-4000 series except HIST 3400, HIST 4030, and HIST 4031 are acceptable courses in a master's program.

Advancement to Candidacy

In addition students must meet the requirements of Advancement to Candidacy confirming that a student is prepared to finish the degree and is recommended as a degree candidate. A Classified Graduate student in good standing is eligible to be advanced to candidacy for the master's degree after:

- completing 12 quarter units applicable to the degree program
- completing HIST 6010 and HIST 6030
- submitting a proposal for the Master's thesis, project, or two fields of examination to the Graduate Committee
- obtaining the Graduate Coordinator's approval of the student's committee, comprised of at least two faculty members.

History, University Thesis Option, M.A.

Program Description

The Master of Arts degree in History is designed to meet the varied needs and interests of students seeking an advanced degree in history. The program educates students in advanced skills in historical research, writing, interpretation and research, and provides opportunities for training in teaching and public history. Four options permit students to plan their coursework to best suit their goals within the overall program requirements and the range of courses offered.

The program includes graduate course offerings in historical research and historiography, conference (seminar) courses, undergraduate or graduate elective units, and a culminating master's project. Elective units may be taken in other fields with the approval of the graduate coordinator. The master's project may be a university thesis, examinations in major and minor fields, a public history project or a graduate teaching project, depending on the option chosen.

Because the majority of students in the master's program are employed full-time during the day, graduate courses are offered in the evening, usually on a one-night-a-week basis, in fall, winter, and spring quarters. This schedule allows students time to complete regular assignments, carry on research, and make regular progress toward the M.A. degree.

Student Learning Outcomes

Students graduating with an M.A. in History from Cal State East Bay will be able to:

- possess advanced knowledge of United States history and the history of at least one other geographical region;
- understand major arguments and themes in contemporary historiography, cross-cultural and interdisciplinary approaches to historical study, and humanistic values;
- demonstrate familiarity with Bay Area research libraries, archives, special collections, and digital sources;
- possess advanced writing and interpretive skills for analyzing both secondary and primary sources, and demonstrate advanced research abilities;

- complete a major independent project in history;
- observe the standards of academic integrity and attribution of sources, and practice the values of the historical profession, including ethics and standards for work in research libraries, on the Internet, at professional conferences, and at interviews for employment.

Career Opportunities

The master's program is especially suited to individuals interested in enhancing their careers as secondary school teachers, in qualifying as community college faculty, or training as historical editors, archivists, museum professionals and Bay Area or California historians. It is also useful for individuals interested in retraining for careers in history or in preparing for doctoral programs in history.

Faculty

Although most graduate students find it convenient to specialize in American and California history, the History Department faculty also includes specialists in European, Asian, and Latin American history. Qualified graduate students may usually carry out research and specialize in these areas as well. The full-time faculty are professional scholars, widely published in their respective fields and active in regional and national historical associations. The department has many years' experience in advising and training master's students in history.

Option Areas

All History graduate students may complete their degrees with culminating examinations in a major and a minor field, selected in consultation with their graduate committees. Students may also choose one of three other options: Teaching, Public History, or University Thesis. These options are distinguished chiefly by their capstone projects, but the Teaching and Public History options also include courses especially designed for the field. Students must apply to the department for permission to complete their programs in any of the three options.

HIST 6010 and 6030

All graduate students are required to take HIST 6010 - Seminar in History, and HIST 6030 - Graduate Historiography. These two important seminars provide students with first-hand experience in primary source research in Bay Area collections and libraries and on the Internet, and with advanced knowledge of trends in the study of historical interpretation and writing, cross-cultural and interdisciplinary approaches to history, humanistic values in history and ethical standards. Students are urged to take these two courses in their first year of graduate study. Proficiency in information literacy is required for each course.

Distinctive Features

Research opportunities in Bay Area and California history abound at the University of California, Berkeley; the Bancroft Library; the National Archives at San Bruno; and numerous private collections in the region. The University Library provides excellent reference, Internet, and interlibrary loan services and contains substantial print and microfilm holdings.

Internships

History graduate students are encouraged to gain experience in applied history through internships at historical agencies in the Bay Area, depending on availability. Internships, like all formal appointments, entail an application process and interview. Internships are nearly always non-paying, but all graduate students are eligible to enroll in up to 4 units of HIST 6901 - Internship in Public History, as a substitution for an elective in the program (see Degree Requirements below).

Readerships

Pending annual funding, students may also acquire experience in lower-division teaching through paid Readerships, upon application to the History Department.

Scholarships

Qualified history graduate students are eligible for graduate financial aid through the loan and fellowship programs administered by the Financial Aid Office. Small scholarships, pending available funds, are awarded annually to assist graduate students in completing their master's projects.

Admission

Admission to the master's program generally requires a B.A. degree major in History, or the equivalent, and a minimum GPA of 3.0 ("B") in the last two years of undergraduate work and 3.25 ("B+") in history. A one-page statement of purpose, a writing sample, and two letters of recommendation must accompany applications. In addition, applicants must submit their scores on the Graduate Record Exam (GRE) to the History Department office. Interested students with degrees in related disciplines, such as American Studies, Ethnic Studies, Political Science, Art or Theater History, and Literature, and suitable academic backgrounds in history are encouraged to apply but will be required to complete prerequisite coursework in history.

Students without necessary background in research or writing may also be admitted to the program as "Conditionally Classified Graduate" students with the requirement that they complete HIST 4030 and/or HIST 4031 at a specified grade level before being admitted to "Classified Graduate" status. Students meeting all admissions requirements, and who have satisfied the University Writing Skills Requirement, are eligible to be admitted as "Classified Graduate" students. Applicants should consult with the History Graduate Coordinator for advising. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Degree Requirements

The Master of Arts degree in History consists of 45 units. Each of the four options in the master's program requires a prescribed program of 45 units listed below. Reading proficiency in a foreign language is strongly encouraged, especially for those planning to pursue doctoral degrees or research careers.

I. Core Courses (13 units)

- HIST 6010 - Seminar in History *Units: 5*
- HIST 6030 - Graduate Historiography *Units: 4*
- HIST 6050 - History Graduate Portfolio *Units: 4*

II. Conference Courses (12-16 units)

Complete three to four conference courses, depending on choice of option (below) in at least two different areas. Students taking University Thesis must complete one conference course in the general area of the thesis topic. The same course number may be taken more than once if the content is significantly different. Conference courses are as follows:

- HIST 6100 - Conference Course in Ancient and Medieval History *Units: 4*
- HIST 6200 - Conference Course in European History *Units: 4*
- HIST 6300 - Conference Course in Asian and Middle Eastern History *Units: 4*
- HIST 6400 - Conference Course in United States History *Units: 4*

III. Electives (8-12)

Eight (8) to twelve (12) units of upper division or graduate courses in History, depending on choice of option. Students in the Public History Option may select, with the approval of the Public History and Internship Coordinator and the Graduate Coordinator, courses in other disciplines specific to their professional goals. All students may substitute HIST 6901 - Internship in Public History and/or HIST 6900 - Independent Study for 4-8 units of electives, with approval of the Graduate Coordinator.

IV. Option Courses (4-12 units)

Students must select one of the options outlined below. Students are required to consult with the Graduate Coordinator regarding the selection of their conference courses and electives above, and for guidance in obtaining required approval for their chosen capstone project.

B. University Thesis Option

Capstone Experience: University Thesis.

Must take HIST 6910 1-8 under supervision of faculty mentor. See requirement for conference course in B. Conference Courses above. Option requires twelve (12) units of Conference Courses and twelve (12) units of Electives.

Upper Division Courses Acceptable for the Master's Degree

All History courses in the 3000-4000 series except HIST 3400, HIST 4030, and HIST 4031 are acceptable courses in a master's program.

Advancement to Candidacy

In addition students must meet the requirements of Advancement to Candidacy confirming that a student is prepared to finish the degree and is recommended as a degree candidate. A Classified Graduate student in good standing is eligible to be advanced to candidacy for the master's degree after:

- completing 12 quarter units applicable to the degree program
- completing HIST 6010 and HIST 6030
- submitting a proposal for the Master's thesis, project, or two fields of examination to the Graduate Committee
- obtaining the Graduate Coordinator's approval of the student's committee, comprised of at least two faculty members.

Interdisciplinary Studies, M.A.

Program Description

The purpose of the Interdisciplinary Studies Major and the Special Certificate programs is to allow students, with the advice and approval of knowledgeable faculty and administrators, to design their own academic programs tailored to their unique needs and interests.

At least two separate degree-granting programs must be involved. A graduate Interdisciplinary Studies Major must be approved no later than the time when the student has fewer than 32-39 quarter units to complete for the degree. This is to ensure that a significant portion of the program is planned in advance by the student and his/her faculty advisors, and that the residence requirement can be met. The diploma will read "Interdisciplinary Studies Major in (program title)."

The Interdisciplinary Studies Major program should not be seen as a device to avoid certain requirements of a regular major, nor as a means to gain admission to an impacted program. Likewise, an Interdisciplinary Studies Major cannot be developed in areas such as architecture, agriculture, and home economics where the campus currently lacks the necessary faculty expertise and physical facilities. Finally, an Interdisciplinary Studies Major is not a self-study, independent study, or external degree program.

Student Learning Outcomes

Because Interdisciplinary Studies Majors are individualized courses of study, student learning outcomes will be individually created for each student by the student's Interdisciplinary Studies Major Committee. All students, however, who graduate with an M.A. or M.S. Interdisciplinary Studies Major from Cal State East Bay will be able to: 1) approach an issue or problem from at least two disciplinary perspectives; and 2) demonstrate mastery of an interdisciplinary approach to an issue or problem in a capstone assignment (project, thesis, or comprehensive exam).

Major Requirements (M.A./M.S.)

The university offers the Interdisciplinary Studies Major program for both the M.A. and M.S. degrees. There is not a clear distinction between the two degrees so normally the decision about the assignment of an Interdisciplinary Studies Major reflects the type of degree offered by the departments involved. An Interdisciplinary Studies Major must be a coherent program of 45-52 units organized around a broad academic theme. The title should be short (three to five words) and should describe the central academic theme of the program and not the student's career objective unless the two coincide. A graduate Interdisciplinary Studies Major must be fully approved before the student has fewer than 32-39 quarter units to complete for the degree so the residence requirement can be met. (A maximum of 13 non-resident units is allowed.)

A department with a regular master's degree program (the sponsoring department) must certify that the prospective Interdisciplinary Studies Major student would be eligible for admission to its program as a "Conditionally Classified" or "Classified Graduate" student. (However, the student who

obtains an approved Interdisciplinary Studies Major is not admitted to the regular graduate program, but to the Interdisciplinary Studies Major program under the Office of Academic Programs and Graduate Studies.)

A graduate Interdisciplinary Studies Major must consist of 45-52 quarter units of which at least half must be in graduate (6000-level) courses and at least 32-39 must be in residence in the program at Cal State East Bay. No more than 9 units may be in supervisory courses such as Independent Study, Project, Department or University Thesis, Field Work, Co-op Ed, and/or Internship. Graduate level courses in at least two different departments must be involved in the program. No course enrollment used in the Interdisciplinary Studies Major can be older than five years at the intended time of graduation. A 3.00 grade point average is required for completion of the graduate Interdisciplinary Studies Major. If a student has not satisfied the University Writing Skills requirement, admission is in "Conditionally Classified" status until the requirement is satisfied. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

A student is Advanced to Candidacy if, after completion of half the program, a 3.0 GPA is attained by a "Classified Graduate." Failure to achieve Candidacy will void the Interdisciplinary Studies Major contract. The student must comply with the standard master's degree requirements for all students listed in the Admission/Graduate chapter in this catalog.

Procedure

A student who contemplates developing an Interdisciplinary Studies Major must have an overall undergraduate and postbaccalaureate grade point average of at least 3.0 ("B," Adequate). Forethought and planning will need to precede any formal action. You may make an appointment to discuss all the necessary steps for getting your Interdisciplinary Studies major approved by emailing the Graduate Interdisciplinary Studies Coordinator at jennifer.eagan@csueastbay.edu.

The prospective Interdisciplinary Studies Major student must prepare a one-page prospectus of at least 200 words describing the theme or central academic focus of the proposed program (including the departments to be involved), the reasons why the objective cannot be fulfilled through a regular master's degree program, the academic and experiential background the student will bring to the program, the occupational goals of the student in relation to the proposal, the approximate time frame for completion of the degree, and other pertinent information. A sample prospectus for a hypothetical Interdisciplinary Studies Major will be given to the student by the Graduate Interdisciplinary Studies Coordinator when they meet at the information appointment, which starts the process towards an approved Interdisciplinary Studies major. The student must also contact three faculty advisors in the involved departments, secure their support, and nominate them as his/her Interdisciplinary Studies Major committee. (One of these faculty members should be designated as chair of the committee.)

The prospectus and the names of the sponsoring department chair and three faculty advisors (and their departments) must be submitted to the Graduate Interdisciplinary Studies Coordinator.

If the proposal is found academically sound and logistically feasible by the Senior Director of Graduate Studies and Academic Programs, the Graduate Interdisciplinary Studies Coordinator will forward copies of it to the proposed faculty committee members along with an explanation of the Interdisciplinary Studies Major policies and procedures, copies of the student's transcripts, and a form for development and approval of the specific program of courses. At that time, the student will be instructed to submit a paper graduate application to the University to the Graduate Admissions Office.

The three-person committee and the student must meet at a mutually acceptable time to design the program (i.e., to prepare the list of required and elective courses and to determine the appropriate culminating experience). When this is done, the form is completed, signatures of approval are affixed, and it is returned to the Graduate Interdisciplinary Studies Coordinator by the committee chair.

The Senior Director of Graduate Studies will review the proposal and, if it satisfies university requirements, the coordinator will send a copy to the dean of each college in which the student will be taking courses. The Senior Director of Graduate Studies will also designate the college from which the student is to graduate. The college deans will have ten working days (two weeks) to enter any objections. If none is received, the Senior Director of Graduate Studies will act on the proposal. If an objection is received, the Senior Director of Graduate Studies will hold the proposal pending resolution by the college dean, committee, and the student.

When the proposed program has been approved by the Associate Vice President, a final copy will be prepared in the Office of Academic Programs and Graduate Studies, the student and the Graduate Interdisciplinary Studies Coordinator will sign it, and copies will be distributed. The student will receive a copy of his/her approved Interdisciplinary Studies Major program at this time.

If any alterations of the approved program are necessary, the student emails the Graduate Interdisciplinary Studies Coordinator to initiate a "Change in Interdisciplinary Studies Major Requirements" form with the chair of his/her faculty advisory committee. A petition must be approved by the advisor (committee chair), the dean of the college from which the student will graduate, and the Graduate Interdisciplinary Studies Coordinator. Upon completion of 23 units with a 3.00 GPA and satisfaction of the University Writing Skills Requirement, a "Classified Graduate" student should request the committee chair to submit a "Change in Graduate Status" form to the Registrar's Office.

The Interdisciplinary Studies Major student will file for graduation during the first two weeks of the quarter immediately preceding the final quarter before graduation. The graduation check for the Interdisciplinary Studies Major is performed by the Graduate Coordinator and submitted to the Graduation Evaluations section of the Planning, Enrollment Management, and Student Affairs Office.

A student who is writing a University Thesis should be aware of the thesis requirements and deadlines published in the Catalog and in the University Thesis Writing Guide (www.csueastbay.edu/thesiswritingguide). The University Thesis must be submitted to the Thesis Office in Academic Programs and Graduate Studies no later than three weeks before the end of the last quarter. In addition to the mandatory university copy and any personal copies, the student must order at least one bound copy of the thesis for the chair of his/her committee.

Special Certificates

A program leading to the award of a Special Certificate must consist of at least 20 quarter units of upper division and/or graduate courses. A minimum grade point average of 2.00 is required for all the courses comprising the Special Certificate program. The program must provide a logical and coherent pattern of preparation for a limited objective. The title of the proposed certificate should be brief (three to five words) and must carry no connotation of meeting a licensing requirement for professional practice.

Procedure

The following procedure applies to Special Certificate programs consisting largely of postbaccalaureate and/or graduate courses:

The student develops a proposed program with the advice and approval of a faculty member knowledgeable in the field of study. The completed "Undergraduate/Graduate Special Certificate Proposal" (found at Certificate Information Sheet), with advisor and student approval, is forwarded by the advisor to the dean of the college in which the preponderance of courses will be taken. If the dean approves, s(he) signs and sends the proposal to the Graduate Interdisciplinary Studies Coordinator in the Office of Academic Programs and Graduate Studies. The coordinator then sends a copy of the proposal to each of the other three college deans.

The deans have ten working days to enter an objection. If none is received and the Senior Director of Graduate Studies judges the proposal to be sound, the program will be approved. If any college dean objects, s(he) must file written objections with the Graduate Interdisciplinary Studies Coordinator within the ten days. These will be considered by the Senior Director of Graduate Studies in deciding whether or not to approve the program.

The student is notified in writing by the Graduate Interdisciplinary Studies Coordinator as to the final action on his/her proposal. A copy of an approved program is filed in the student's on-line file and in the Interdisciplinary Studies Major Coordinator's office. Upon completion of the Special Certificate program, the student applies to the Registrar's Office and pays the required fee to receive the certificate.

Interdisciplinary Studies, M.S.

Program Description

The purpose of the Interdisciplinary Studies Major and the Special Certificate programs is to allow students, with the advice and approval of knowledgeable faculty and administrators, to design their own academic programs tailored to their unique needs and interests.

At least two separate degree-granting programs must be involved. A graduate Interdisciplinary Studies Major must be approved no later than the time when the student has fewer than 32-39 quarter units to complete for the degree. This is to ensure that a significant portion of the program is planned in advance by the student and his/her faculty advisors, and that the residence requirement can be met. The diploma will read "Interdisciplinary Studies Major in (program title)."

The Interdisciplinary Studies Major program should not be seen as a device to avoid certain requirements of a regular major, nor as a means to gain admission to an impacted program. Likewise, an Interdisciplinary Studies Major cannot be developed in areas such as architecture, agriculture, and home economics where the campus currently lacks the necessary faculty expertise and physical facilities. Finally, an Interdisciplinary Studies Major is not a self-study, independent study, or external degree program.

Student Learning Outcomes

Because Interdisciplinary Studies Majors are individualized courses of study, student learning outcomes will be individually created for each student by the student's Interdisciplinary Studies Major Committee. All students, however, who graduate with an M.A. or M.S. Interdisciplinary

Studies Major from Cal State East Bay will be able to: 1) approach an issue or problem from at least two disciplinary perspectives; and 2) demonstrate mastery of an interdisciplinary approach to an issue or problem in a capstone assignment (project, thesis, or comprehensive exam).

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Procedure

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The prospective Interdisciplinary Studies Major student must prepare a one-page prospectus of at least 200 words describing the theme or central academic focus of the proposed program (including the departments to be involved), the reasons why the objective cannot be fulfilled through a regular master's degree program, the academic and experiential background the student will bring to the program, the occupational goals of the student in relation to the proposal, the approximate time frame for completion of the degree, and other pertinent information. A sample prospectus for a hypothetical Interdisciplinary Studies Major will be given to the student by the Graduate Interdisciplinary Studies Coordinator when they meet at the information appointment, which starts the process towards an approved Interdisciplinary Studies major. The student must also contact three faculty advisors in the involved departments, secure their support, and nominate them as his/her Interdisciplinary Studies Major committee. (One of these faculty members should be designated as chair of the committee.)

The prospectus and the names of the sponsoring department chair and three faculty advisors (and their departments) must be submitted to the Graduate Interdisciplinary Studies Coordinator.

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Special Certificates

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Procedure

The following procedure applies to Special Certificate programs consisting largely of postbaccalaureate and/or graduate courses:

The student develops a proposed program with the advice and approval of a faculty member knowledgeable in the field of study. The completed "Undergraduate/Graduate Special Certificate Proposal" (found at Certificate Information Sheet), with advisor and student approval, is forwarded by the advisor to the dean of the college in which the preponderance of courses will be taken. If the dean approves, s(he) signs and sends the proposal to the Graduate Interdisciplinary Studies Coordinator in the Office of Academic Programs and Graduate Studies. The coordinator then sends a copy of the proposal to each of the other three college deans.

The deans have ten working days to enter an objection. If none is received and the Senior Director of Graduate Studies judges the proposal to be sound, the program will be approved. If any college dean objects, s(he) must file written objections with the Graduate Interdisciplinary Studies Coordinator within the ten days. These will be considered by the Senior Director of Graduate Studies in deciding whether or not to approve the program.

The student is notified in writing by the Graduate Interdisciplinary Studies Coordinator as to the final action on his/her proposal. A copy of an approved program is filed in the student's on-line file and in the Interdisciplinary Studies Major Coordinator's office. Upon completion of the Special Certificate program, the student applies to the Registrar's Office and pays the required fee to receive the certificate.

Kinesiology, M.S.

Program Description

The Department of Kinesiology offers programs focusing on fundamental analysis of sport exercise and physical activity phenomena. The purpose of the Master of Science degree program is to give students a cross-disciplinary knowledge of kinesiology and develop their scholarly skills. The

program serves as a terminal degree for professionals as well as preparation for those intending to complete a doctorate. Because most students are working professionals, graduate courses are offered during the evening hours.

Student Learning Outcomes

Students who graduate with an M.S. in Kinesiology will be able to:

- Demonstrate the ability to synthesize and apply perspectives from the humanities, and the social-, behavioral-, and life-sciences.
- Use disciplinary knowledge to design and implement innovative professional application.
- Characterize thought processes by the exploration of discipline-relevant issues, ideas, artifacts, and events before accepting or formulating a perspective.
- Use contextually-grounded and compelling content to articulate physical activity issues in both oral and written form.
- Demonstrate professional dispositions - such as integrity, personal and cultural sensitivity, and collaboration - as well as commitment to social justice for physical activity participants when leading others in a kinesiology-relevant domain.

Career Opportunities

- Athletic Director
- Cardiopulmonary Rehabilitation Specialist
- Community College Teacher
- Corporate Fitness Director
- Intercollegiate and Interscholastic Coach
- Exercise Physiologist
- Personal Trainer
- Physical Education Administrator
- Physical Education Teacher
- Sport Psychology Consultant
- University Instructor
- Wellness Counselor/Educator

Faculty: Areas of Specialization

- Matthew Atencio, Ph.D.: Sport sociology, sport philosophy, research methodologies, physical education pedagogy, educational theory
- Rebecca Beal, Ed.D: Sport philosophy, sport sociology
- Paul Carpenter, Ph.D.: Sport and exercise psychology, endurance sport
- Catherine Inouye, Ed.D.: Exercise physiology, exercise nutrition
- Rita Liberti, Ph.D.: Sport sociology, sport history
- Penny McCullagh, Ph.D.: Sport and exercise psychology, motor learning, development, observational learning
- Za'Neen D. McClain, Ph.D.: Sport pedagogy
- My Phung (Jenny) O, Ph.D.: Enhancing optimal performance, sport and exercise psychology, motor learning and control
- Jeffery P. Simons, Ph.D.: Sport and exercise psychology, lifetime physical activity participation, motor learning and control
- Missy Wright, Ph.D.: Sport and exercise psychology, measurement and evaluation
- Vanessa Yingling, Ph.D.: Biomechanics, bone physiology and mechanics

Features

Upon acceptance into the program, students are immediately directed to a faculty member who will assist them in developing a course of study. Emphasis areas include, but are not limited to, exercise physiology, psychology of physical activity, teaching and coaching, socio-cultural influences on physical activity.

The department offers a complete range of laboratory facilities and technologies for graduate students. These resources enable comprehensive research opportunities in all areas of study. Motion analysis software, ventilatory gas analysis, biofeedback, coincidence timing, nutritional analysis, bone scanner, body composition analysis and computer statistical packages are examples of available tools.

Other features include the potential for individualized programs of study to meet specific interests and needs, extensive library resources, and an instructional format which stimulates high interaction among students and promotes independent scholarship.

Admission to the Program in "Classified Graduate" Status

Eligibility for admission to the M.S. degree program in "Classified Graduate" status requires a student to have a baccalaureate degree with a major approximately equivalent to the Cal State East Bay B.S. degree in kinesiology. The graduate coordinator or department chair will determine degree equivalencies. Students must also have attained at least a 3.00 grade point average in the major and have satisfied the University Writing Skills requirement.

The department encourages students to meet university prescribed deadlines for admission into the program beginning in the fall quarter, although the department is willing to accept graduate students into the program during winter and spring quarters.

"Conditionally Classified Graduate" Status

Students who are judged to be admissible, but who do not meet all of the admission requirements specified above for "Classified Graduate" status, receive "Conditionally Classified Graduate" standing. Such students may need to complete certain undergraduate prerequisites in preparation for graduate study and/or may have other deficiencies, such as the University Writing Skills requirement, that must be resolved within the first two quarters of enrollment. Each student will be judged on an individual basis. The department may require the Graduate Record Examination (GRE), Aptitude Test Score, three letters of recommendation from former professors, written essay, and/or the repeat of undergraduate coursework in the case of below-standard grade point averages.

Generally, courses taken to resolve deficiencies will not count for credit in the M.S. program. In no case will more than 13 quarter units taken in "Unclassified Post-baccalaureate" standing or at another university be counted toward the M.S. degree.

Advancement to Candidacy

"Classified Graduate" students are eligible for Advancement to Candidacy based on the criteria given below.

- Maintain a 3.00 grade point average in all graduate work completed.
- Complete KIN 6000 at the first opportunity and no later than the first three quarters in the program.
- Submit to the graduate coordinator an approved program of study developed in conjunction with the appropriate faculty committee.
- Have passed the Writing Skills requirement or equivalency.

Prerequisite Courses (35-37 units)

In the absence of an appropriate undergraduate degree, prerequisite coursework must be completed. Generally, courses taken to resolve deficiencies will not count for credit in the M.S. program. Preparatory work for students with undergraduate degrees in other fields is described below. Note: these courses must be completed with a grade of "B" or higher in each course, prior to enrollment in any graduate class.

A. Critical Inquiry in Kinesiology

- KIN 3300 - Critical Inquiry in Kinesiology *Units: 5* (Applied statistics background is acceptable equivalent.)

B. Structural Kinesiology

- KIN 3305 - Structural Kinesiology *Units: 4* (Functional anatomy background is acceptable equivalent.)

C. Three courses (14-15 units) complete from:

- KIN 3310 - Biomechanics *Units: 5*
- or
- KIN 3340 - Motor Development *Units: 4*

- KIN 3320 - Exercise Physiology *Units: 5*
- KIN 3330 - Motor Learning and Control *Units: 5*

D. Three courses (12-13 units) completed from:

- KIN 3350 - Sport and Exercise Psychology *Units: 5*
 - KIN 3700 - History of Sport and Physical Education *Units: 4*
 - KIN 3740 - Philosophical Foundations of Kinesiology *Units: 4*
- or*
- KIN 3750 - Sport in Contemporary Society *Units: 4*

Waiver of one or more of these area requirements will be considered if comparable coursework has been completed, or if the student has strong compensating academic strengths in areas related to the graduate program (a degree in Physical Therapy, for example). All requests for such waivers and their justification must be approved by academic advisor and submitted in writing to the graduate coordinator.

Degree Requirements

The Master of Science degree will be awarded when the general requirements listed below have been successfully completed:

- Completion of a minimum of 45 quarter units of approved upper division and graduate courses
- A minimum grade point average of 3.00
- Completion of a Culminating Experience (specific requirements for the Culminating Experience Project are described in the Graduate Handbook).
- In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These requirements include the 32-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661

Curriculum Requirements (45-50 units)

I. Required Courses (20 units)

- KIN 6000 - Foundations of Graduate Study and Research *Units: 5*
- KIN 6411 - Psychology of Physical Activity *Units: 4*
- KIN 6435 - Critical Perspectives on the Body *Units: 4*
- KIN 6655 - Physiological Perspectives on Health and Wellness *Units: 4*
- KIN 6710 - Synthesis in Kinesiology *Units: 4*

II. Elective Courses (24 units)

In addition to the five required core classes, the student, in consultation with their academic advisor, will develop an academic program of study selected from the following elective courses for a total of 24 units:

- KIN 6412 - Psychomotor Skill Acquisition *Units: 4*
- KIN 6413 - Mental Skills for Physical Performance *Units: 4*
- KIN 6416 - Exercise Psychology *Units: 4*
- KIN 6425 - Political Issues in Kinesiology *Units: 4*
- KIN 6445 - Social Inclusion in Physical Activity *Units: 4*
- KIN 6470 - Seminar in Exercise and Nutrition *Units: 4*
- KIN 6605 - Teaching and Coaching Effectiveness *Units: 4*
- KIN 6670 - Training for Physical Performance *Units: 4*
- KIN 6700 - Seminar: Contemporary Issues in Kinesiology *Units: 4*

- KIN 6850 - Supervised Research *Units: 2-4*
- KIN 6900 - Independent Study *Units: 1-4*

Students may also enroll in 4000 level courses to count towards the degree but must first get permission from their academic advisor.

Note:

Maximum of a combined five (5) units of KIN 6850 - Supervised Research and KIN 6900 - Independent Study may be used to meet the 45 minimum unit requirement. These courses are restricted to those students who are working closely with a faculty advisor who has deemed the student suitable for this type of independent scholarly work. Additional courses may be selected in consultation with the academic advisor.

III. Culminating Experience (1-6 units)

- KIN 6899 - Project *Units: 2-5*

or

- KIN 6909 - Departmental Thesis *Units: 2-5*

or

- KIN 6910 - University Thesis *Units: 2-6*

• All students will meet with their faculty advisors to determine which of the above forms of Culminating Experience best meets their goals. Specific requirements for the Culminating Experience Project are described in the Graduate Handbook.

IV. Post-Baccalaureate Course

Consult an advisor to determine if this course can be applied to the M.S. degree.

- KIN 5900 - Independent Study *Units: 1-4*

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills requirement.

Marine Science, M.S.

Program Description

This degree program, offered through the Department of Biological Sciences and the Department of Earth and Environmental Sciences, provides the opportunity for students to acquire a practical and theoretical education in the marine sciences to prepare them for careers as marine specialists, scientists, and teachers. The program at Moss Landing provides interdepartmental work and a field facility for advanced study in the marine sciences which cannot be duplicated on the Cal State East Bay campus.

Admission to the Program

The master's degree program is administered through either the Department of Biological Sciences or Department of Earth and Environmental Sciences, depending on the choice of the student. The prospective student must meet the admission requirements of either of these departments. Refer to descriptions of these department graduate programs for complete information. Students will be accepted as "Conditionally Classified Graduate" students in the department of their choice upon completion of the admission requirements. The student will become a "Classified Graduate" student upon completion of MLML's requirements (below).

MLML Classification in the Program

A "Conditionally Classified Graduate" student may become a fully "Classified Graduate" student in the marine science program as set forth in the following steps:

- Obtain an adviser at MLML and one from the science department at the home campus. Each new student in the master's program at MLML will be assigned an advisor who may or may not be the final thesis advisor.
- Make up any coursework deficiencies in either the home campus department (see their regulations) and/or at MLML. MSC 4104 - Quantitative Marine Science, and three of the following five courses are prerequisites for "Classified Graduate" standing: MSC 4103 - Marine Ecology, 4141 Geological Oceanography, 4142 Physical Oceanography, 4143 Chemical Oceanography, and MSC 4144 - Biological Oceanography. These courses may be waived by the graduate committee upon certification that equivalent courses have been satisfactorily completed. MSC 4104 - Quantitative Marine Science cannot be counted toward the 45 unit degree requirement.
- Students who do not receive a grade of "B" or better in the courses described in (2) above taken at MLML, or who wish to substitute equivalent courses taken elsewhere regardless of the grade(s) received, must petition to have the courses accepted, or must pass a written qualifying examination given by the faculty at MLML. The examination will substitute for any equivalent examination given by home campus departments. There is no official time limit, but the exam should be taken as soon as possible; only a limited number of units taken while in "Conditionally Classified" status can be counted toward the degree. The exam may be repeated once, and must be passed before the student can be "Classified." The examination will consist of a choice of five out of six questions designed to test knowledge of the concepts and principles of oceanography, marine ecology, and statistics as covered in the courses listed under (2) above. It will be used to evaluate the student's background in these subject areas and the ability to write well and formulate answers logically. Each answer will be graded "pass" or "fail" by two faculty members (a third faculty member will resolve disagreements) on accuracy, content, and ability to clearly communicate. For a reading list covering the required material and further details concerning the exam, see MLML's Assistant to the Director.
- Students must have satisfied the University Writing Skills Requirement according to Cal State East Bay standards. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Advancement to Candidacy

In order to be Advanced to Candidacy, the student must have:

- Attained "Classified Graduate" standing;
- Selected a thesis problem and a thesis advisor committee. The thesis committee will be composed of at least three members, including one faculty member from MLML (who is ordinarily the thesis advisor) and, at the discretion of the home campus, a representative from that campus. The other member or members of the thesis committee may be from MLML, the home campus, or elsewhere, with the approval of the thesis advisor.

Curricular Requirements

A student becomes eligible for the master's degree in Marine Science after the following requirements have been satisfied:

1. The student has been Advanced to Candidacy
2. The student has satisfied MLML's requirements for the degree
3. The student has completed the following curriculum requirements:
 - a. A minimum total of 22.5 quarter units of 6000-level courses

A minimum total of 22.5 quarter units of 6000-level courses (a minimum of 45 units), including 3 units of MSC 6285, 6286, or 6287, and 6 units of MSC 6910.

- MSC 6285 - Graduate Seminar in Marine Science *Units: 3*
or
- MSC 6286 *Units: 3*
or
- MSC 6287 *Units: 3*
- 6 Units of MSC 6910 - University Thesis *Units: 1.5-6*

b. A total of not more than 22.5 units of 3000-, 4000-, and/or 6000-level courses

A total of not more than 22.5 units of 3000-, 4000-, and/or 6000-level courses as approved by the thesis committee. Elective courses that may be used to satisfy requirements for the major are listed below by catalog number, title, and quarter units of credit:

- MSC 4112 - Marine Birds and Mammals *Units: 6*
- MSC 4113 - Marine Ichthyology *Units: 6*
- MSC 4124 - Marine Invertebrate Zoology I *Units: 6*
- MSC 4125 - Intertidal Invertebrates of California *Units: 4.5*
- MSC 4131 - Marine Botany *Units: 6*
- MSC 4135 - Physiological Ecology of Marine Algae *Units: 6*

- MSC 6204 - Sampling and Experimental Design *Units: 6*
- MSC 6208 - Scientific Methods *Units: 6*
- MSC 6211 - Ecology of Marine Birds and Mammals *Units: 6*
- MSC 6233 - Advanced Topics in Marine Ecology *Units: 1.5-6*
- MSC 6234 - Advanced Biological Oceanography *Units: 6*
- MSC 6242 - Plate Tectonics *Units: 4.5*
- MSC 6261 - Ocean Circulation and Mixing *Units: 6*
- MSC 6262 - Satellite Oceanography *Units: 6*
- MSC 6263 - Application of Computers in Oceanography *Units: 6*
- MSC 6271 - Population Biology *Units: 4.5*
- MSC 6274 - Advanced Topics in Oceanography *Units: 1.5-6*
- MSC 6280 - Scientific Writing *Units: 3*
- MSC 6900 - Independent Study *Units: 1.0-9*

Other electives, including courses from the home campus departments, may be included after consultation with the advisory committee. The combination of required units (seminar and thesis) and elective units must total at least 45 quarter units.

4. The student must have submitted a University Thesis

The student must have submitted a University Thesis approved by the thesis advisory committee. The thesis must conform to the rules set forth in the Cal State East Bay "University Writing Guide," available online at: www.csueastbay.edu/thesiswritingguide.

5. The student must successfully give an oral thesis defense

The student must successfully give an oral thesis defense in the form of a seminar open to the general public. The thesis advisory committee must be present, may require further oral questioning after the seminar, and will evaluate the success of the presentation.

Mathematics, Applied Mathematics Option, M.S.

Program Description

The Mathematics and Computer Science Department offers graduate study leading to the degree of Master of Science in Mathematics. The goal of the faculty is to provide excellent instruction in advanced mathematics and to maintain a supportive environment for graduate students. Students who complete the program should be equipped for careers in community college teaching or positions in industry that require knowledge of mathematics beyond the undergraduate level. The M.S. degree in Mathematics can also serve as preparation for advanced study toward a Ph.D. degree in mathematics or a related field.

Our program features small classes that allow for close contact between students and faculty. Many graduate classes are offered in the late afternoon or early evening, making it possible for working students to attend. Courses toward the M.S. degree may also be taken during the summer quarter. Students may begin their studies in any one of the four quarters.

Students interested in the M.S. degree program in Mathematics should speak with the Mathematics Graduate Coordinator.

Student Learning Outcomes

Students who graduate with an M.S. in Mathematics will be able to:

- apply the fundamental definitions and theorems of pure mathematics;
- apply the fundamental definitions and theorems of applied mathematics;
- apply advanced techniques of mathematical analysis;
- apply techniques of advanced algebra;
- apply advanced techniques of geometry and topology;
- use mathematical algorithms.

Career Opportunities

A number of former Cal State East Bay students currently hold positions as community college mathematics teachers. Others have found the M.S. degree in mathematics to be an ideal preparation for further studies at doctorate-granting institutions and have continued by working towards a Ph.D. degree in mathematics or a related field such as operations research, physics, or economics. A number of these alumni are now professors at four-year institutions. Still others are in mathematics-related careers in industry.

Faculty

The faculty of the Mathematics and Computer Science Department hold doctorates in a wide variety of areas of specialization and offer courses encompassing a broad range of pure and applied mathematics, including standard graduate mathematics courses as well as courses in new areas. Areas of emphasis include numerical analysis, pure and applied algebra, differential equations, real and complex analysis, topology, geometry, mathematical optimization, computer simulation, probability, statistics, and selected topics in applied mathematics.

Special Features

Each quarter, a limited number of teaching positions are available to qualified graduate students. These positions, which generally involve teaching one lower division mathematics course per quarter, provide valuable experience, especially for those who intend to become community college teachers. The department also employs qualified students as paper graders.

Mathematics students have access to modern computer equipment, including various mathematical software packages.

The CSUEB Mathematics Club is open to all interested students. This club features lectures by students and faculty and offers a variety of social activities.

Scholarships

Each year the department awards a number of scholarships for the subsequent year. Scholarship applications may be obtained from the department office during the winter quarter.

Options

There are three options available. Option I emphasizes coursework drawn from fundamental branches of mathematics: algebra, topology, and real and complex analysis. Option II, Mathematics Teaching, is intended for those who hold secondary teaching credentials and who intend to pursue a career in secondary education. Option III, Applied Mathematics, is designed to expose students to various aspects of applied mathematics, while allowing some coursework in "pure" mathematics as well. Students who intend to become community college teachers or go on to further graduate study should select Option I or Option III.

Option III (Applied Mathematics)

Admission

To enter the program with "Classified Graduate" status, a student must have completed a course in computer science and at least 36 quarter units of acceptable upper division mathematics, statistics, or computer science courses with a grade point average of "B" or higher. Included among these units must be courses in:

- Analysis
- Abstract algebra
- Linear algebra theory
- Differential equations

A student may enter the program with "Conditionally Classified Graduate" status while making up course or grade point deficiencies. Units taken to meet course deficiencies may not be applied toward the master's degree, and no more than 20 quarter units taken while in "Conditionally Classified Graduate" status may be applied to the degree.

A "Conditionally Classified Graduate" student who has no course deficiencies, a "B" or higher average in at least 12 quarter units of post baccalaureate study, and has satisfied the University Writing Skills Requirement, should petition the department graduate coordinator for a change to "Classified Graduate" status.

Advancement to Candidacy

A student with "Classified Graduate" status may apply for Advancement to Candidacy after completing at least 16 quarter units towards the master's degree with a "B" or higher average, including at least two 6000-level mathematics courses with a "B" or higher average.

Before being Advanced to Candidacy, a student's complete course of study must be approved by the Mathematics Graduate Studies Committee. In particular, approval must be obtained for any course(s) taken outside the Mathematics and Computer Science Department.

Degree Requirements

The following departmental requirements must be satisfied:

A. The following four courses (or their equivalents) must be completed, either as an undergraduate or as a graduate student:

- MATH 3301 - Analysis II *Units: 4*
- MATH 3401 Introduction to Probability Theory I *Units: 4*
- MATH 3750 - Numerical Analysis I *Units: 4*
- MATH 3841 - Linear Programming *Units: 4*

B. The 45 quarter units applied to the degree must include:

1. At least 22 1/2 quarter units of 6000 level courses of which at least 18 are mathematics courses.

At least 22 1/2 quarter units of 6000 level courses of which at least 18 are mathematics courses. Credit will be given for the seven MATH courses (MATH 6015-MATH 6065, and MATH 6899), only with the permission of the Mathematics Graduate Committee.

2. At least two of the following five courses:

- MATH 6100 - Applied Algebra *Units: 4*
- MATH 6331 - Topics in Differential Equations *Units: 4*
- MATH 6401 - Advanced Probability I *Units: 4*
- MATH 6750 - Topics in Advanced Numerical Analysis *Units: 4*
- MATH 6870 - Computer Simulation *Units: 4*

C. A comprehensive examination must be passed

A comprehensive examination must be passed. Details are available in the department office.

Upper Division Mathematics, Computer Science, and Statistics Courses Acceptable for M.S. in Mathematics

- Upper division and graduate computer science courses may be used with the approval of the Mathematics Graduate Studies Committee.
- Other upper division mathematics courses may be used with the approval of the Mathematics Graduate Studies Committee. MATH 4012, MATH 4013, MATH 4014, or MATH 4030 will not be approved.
- STAT 3401 - Introduction to Probability Theory I *Units: 4*
- STAT 3402 - Introduction to Probability Theory II *Units: 4*
- STAT 3502 - Statistical Inference I *Units: 4*
- STAT 3503 - Statistical Inference II *Units: 4*
- STAT 4401 - Introduction to Stochastic Processes *Units: 4*

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Mathematics, Mathematics Teaching Option, M.S.

Program Description

The Mathematics and Computer Science Department offers graduate study leading to the degree of Master of Science in Mathematics. The goal of the faculty is to provide excellent instruction in advanced mathematics and to maintain a supportive environment for graduate students. Students who complete the program should be equipped for careers in community college teaching or positions in industry that require knowledge of mathematics beyond the undergraduate level. The M.S. degree in Mathematics can also serve as preparation for advanced study toward a Ph.D. degree in mathematics or a related field.

Our program features small classes that allow for close contact between students and faculty. Many graduate classes are offered in the late afternoon or early evening, making it possible for working students to attend. Courses toward the M.S. degree may also be taken during the summer quarter. Students may begin their studies in any one of the four quarters.

Students interested in the M.S. degree program in Mathematics should speak with the Mathematics Graduate Coordinator.

Student Learning Outcomes

Students who graduate with an M.S. in Mathematics will be able to:

- apply the fundamental definitions and theorems of pure mathematics;
- apply the fundamental definitions and theorems of applied mathematics;
- apply advanced techniques of mathematical analysis;
- apply techniques of advanced algebra;
- apply advanced techniques of geometry and topology;
- use mathematical algorithms.

Career Opportunities

A number of former Cal State East Bay students currently hold positions as community college mathematics teachers. Others have found the M.S. degree in mathematics to be an ideal preparation for further studies at doctorate-granting institutions and have continued by working towards a Ph.D. degree in mathematics or a related field such as operations research, physics, or economics. A number of these alumni are now professors at four-year institutions. Still others are in mathematics-related careers in industry.

Faculty

The faculty of the Mathematics and Computer Science Department hold doctorates in a wide variety of areas of specialization and offer courses encompassing a broad range of pure and applied mathematics, including standard graduate mathematics courses as well as courses in new areas. Areas of emphasis include numerical analysis, pure and applied algebra, differential equations, real and complex analysis, topology, geometry, mathematical optimization, computer simulation, probability, statistics, and selected topics in applied mathematics.

Special Features

Each quarter, a limited number of teaching positions are available to qualified graduate students. These positions, which generally involve teaching one lower division mathematics course per quarter, provide valuable experience, especially for those who intend to become community college teachers. The department also employs qualified students as paper graders.

Mathematics students have access to modern computer equipment, including various mathematical software packages.

The CSUEB Mathematics Club is open to all interested students. This club features lectures by students and faculty and offers a variety of social activities.

Scholarships

Each year the department awards a number of scholarships for the subsequent year. Scholarship applications may be obtained from the department office during the winter quarter.

Options

There are three options available. Option I emphasizes coursework drawn from fundamental branches of mathematics: algebra, topology, and real and complex analysis. Option II, Mathematics Teaching, is intended for those who hold secondary teaching credentials and who intend to pursue a career in secondary education. Option III, Applied Mathematics, is designed to expose students to various aspects of applied mathematics, while allowing some coursework in "pure" mathematics as well. Students who intend to become community college teachers or go on to further graduate study should select Option I or Option III.

Option II (Mathematics Teaching)

Admission

The M.A.T.H. (Mathematics and Teaching at Hayward) option is available only to holders of teaching credentials, unless special permission is obtained. In order to be admitted to the master's degree program with "Classified Graduate" status, a student must have completed 24 or more quarter units of acceptable upper division mathematics with an average of "B" or higher. A student may be admitted to the program with "Conditionally Classified Graduate" status while making up course or grade point deficiencies. Units taken to meet any course deficiencies may not be applied toward the master's degree, and no more than 20 quarter units taken while in "Conditionally Classified Graduate" status may be applied to the degree. A "Conditionally Classified Graduate" student who has no course deficiencies, a "B" or higher average in at least 12 quarter units of post-baccalaureate study, and has satisfied the University Writing Skills requirement, should petition the graduate coordinator for admission to the master's degree program with "Classified Graduate" status.

Advancement to Candidacy

A student with "Classified Graduate" status may apply for Advancement to Candidacy after completing at least 16 quarter units of work toward the master's degree with a "B" or higher average.

Before being Advanced to Candidacy, a student's complete course of study must be approved by the Mathematics Graduate Studies Committee.

Degree Requirements

The following departmental requirements for the M.S. degree are in addition to the general University requirements:

A. Six M.A.T.H core courses (24 units)

- MATH 6015 - Algebra for Teachers *Units: 4*
- MATH 6025 - Geometry for Teachers *Units: 4*
- MATH 6035 - Analysis for Teachers *Units: 4*
- MATH 6045 - Mathematics in the Sciences *Units: 4*
- MATH 6055 - Discrete Mathematics *Units: 4*
- MATH 6065 - Connections in Mathematics *Units: 4*

B. Two Teacher Education courses selected from the following (8 units)

- TED 6010 - Seminar in Teaching and Learning Mathematics *Units: 4*
- TED 6021 - Seminar in Diagnosis and Treatment of Learning Difficulties in Mathematics *Units: 4*
- TED 6030 Seminar on Problem Solving and Critical Thinking in Mathematics *Units: 4*
- TED 6040 - Advanced Curriculum and Instruction in Mathematics *Units: 4*

C. An upper division or graduate-level course

An upper division or graduate-level course offered by the Statistics Department and approved by the Math Graduate Coordinator *Units: 4*

D. One or two upper division or graduate electives

One or two upper division or graduate electives approved by the Math Graduate Coordinator *Units: 4-8*

E. Project

- MATH 6899 - Project *Units: 1-5*

Upper Division Mathematics, Computer Science, and Statistics Courses Acceptable for M.S. in Mathematics

- Upper division and graduate computer science courses may be used with the approval of the Mathematics Graduate Studies Committee.
- Other upper division mathematics courses may be used with the approval of the Mathematics Graduate Studies Committee. MATH 4012, MATH 4013, MATH 4014, or MATH 4030 will not be approved.
- STAT 3401 - Introduction to Probability Theory I *Units: 4*
- STAT 3402 - Introduction to Probability Theory II *Units: 4*
- STAT 3502 - Statistical Inference I *Units: 4*
- STAT 3503 - Statistical Inference II *Units: 4*
- STAT 4401 - Introduction to Stochastic Processes *Units: 4*

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Mathematics, Pure Mathematics Option, M.S.

Program Description

The Mathematics and Computer Science Department offers graduate study leading to the degree of Master of Science in Mathematics. The goal of the faculty is to provide excellent instruction in advanced mathematics and to maintain a supportive environment for graduate students. Students who complete the program should be equipped for careers in community college teaching or positions in industry that require knowledge of mathematics beyond the undergraduate level. The M.S. degree in Mathematics can also serve as preparation for advanced study toward a Ph.D. degree in mathematics or a related field.

Our program features small classes that allow for close contact between students and faculty. Many graduate classes are offered in the late afternoon or early evening, making it possible for working students to attend. Courses toward the M.S. degree may also be taken during the summer quarter. Students may begin their studies in any one of the four quarters.

Students interested in the M.S. degree program in Mathematics should speak with the Mathematics Graduate Coordinator.

Student Learning Outcomes

Students who graduate with an M.S. in Mathematics will be able to:

- apply the fundamental definitions and theorems of pure mathematics;
- apply the fundamental definitions and theorems of applied mathematics;
- apply advanced techniques of mathematical analysis;
- apply techniques of advanced algebra;
- apply advanced techniques of geometry and topology;
- use mathematical algorithms.

Career Opportunities

A number of former Cal State East Bay students currently hold positions as community college mathematics teachers. Others have found the M.S. degree in mathematics to be an ideal preparation for further studies at doctorate-granting institutions and have continued by working towards a Ph.D. degree in mathematics or a related field such as operations research, physics, or economics. A number of these alumni are now professors at four-year institutions. Still others are in mathematics-related careers in industry.

Faculty

The faculty of the Mathematics and Computer Science Department hold doctorates in a wide variety of areas of specialization and offer courses encompassing a broad range of pure and applied mathematics, including standard graduate mathematics courses as well as courses in new areas. Areas of emphasis include numerical analysis, pure and applied algebra, differential equations, real and complex analysis, topology, geometry, mathematical optimization, computer simulation, probability, statistics, and selected topics in applied mathematics.

Special Features

Each quarter, a limited number of teaching positions are available to qualified graduate students. These positions, which generally involve teaching one lower division mathematics course per quarter, provide valuable experience, especially for those who intend to become community college teachers. The department also employs qualified students as paper graders.

Mathematics students have access to modern computer equipment, including various mathematical software packages.

The CSUEB Mathematics Club is open to all interested students. This club features lectures by students and faculty and offers a variety of social activities.

Scholarships

Each year the department awards a number of scholarships for the subsequent year. Scholarship applications may be obtained from the department office during the winter quarter.

Options

There are three options available. Option I emphasizes coursework drawn from fundamental branches of mathematics: algebra, topology, and real and complex analysis. Option II, Mathematics Teaching, is intended for those who hold secondary teaching credentials and who intend to pursue a career in secondary education. Option III, Applied Mathematics, is designed to expose students to various aspects of applied mathematics, while allowing some coursework in "pure" mathematics as well. Students who intend to become community college teachers or go on to further graduate study should select Option I or Option III.

Option I (Pure Mathematics)

Admission

To enter the program with "Classified Graduate" status, a student must have completed at least 36 quarter units of acceptable upper division mathematics with a grade point average of "B" or higher. Included among these units must be courses in:

- Analysis
- Abstract algebra
- Linear algebra theory
- Differential equations

A student may be admitted to the program with "Conditionally Classified Graduate" status while making up course or grade point deficiencies. Units taken to meet any course deficiencies may not be applied toward the master's degree, and no more than 20 quarter units taken while in "Conditionally Classified Graduate" status may be applied to the degree.

A "Conditionally Classified Graduate" student who has no course deficiencies, a "B" or higher average in at least 12 quarter units of postbaccalaureate study, and has satisfied the University Writing Skills Requirement, should petition the graduate coordinator for admission to the master's degree program with "Classified Graduate" status.

Advancement to Candidacy

A student with "Classified Graduate" status may apply for Advancement to Candidacy after completing at least 16 quarter units toward the master's degree with a "B" or higher average, including at least two 6000-level mathematics courses with a "B" or higher average. Before being Advanced to Candidacy, a student's complete course of graduate study must be approved by the Mathematics Graduate Studies Committee.

Degree Requirements

The following departmental requirements must be satisfied:

A. The following four courses (or their equivalents) must be completed, either as an undergraduate or as a graduate student:

- MATH 4121 - Advanced Algebra *Units: 4*
- MATH 4340 - Introduction to Complex Variables *Units: 4*
- MATH 4350 - Theory of Functions of a Real Variable *Units: 4*
- MATH 4360 - Introduction to Topology *Units: 4*

B. The 45 quarter units applied to the degree must include:

1. At least 24 quarter units of 6000-level courses

At least 24 quarter units of 6000-level courses, of which at least 20 quarter units are mathematics courses. Credit will be given for the seven M.A.T.H. courses (MATH 6015-MATH 6065, and MATH 6899), only with the permission of the Mathematics Graduate Committee.

2. At least two of the following four courses:

- MATH 6121 - Topics in Advanced Algebra I *Units: 4*
- MATH 6201 - Topology *Units: 4*
- MATH 6340 - Complex Analysis *Units: 4*
- MATH 6350 - Real Analysis *Units: 4*

C. A comprehensive examination must be passed

A comprehensive examination must be passed. Details are available in the department office and on the department website

Upper Division Mathematics, Computer Science, and Statistics Courses Acceptable for M.S. in Mathematics

- Upper division and graduate computer science courses may be used with the approval of the Mathematics Graduate Studies Committee.
- Other upper division mathematics courses may be used with the approval of the Mathematics Graduate Studies Committee. MATH 4012, MATH 4013, MATH 4014, or MATH 4030 will not be approved.
- STAT 3401 - Introduction to Probability Theory I *Units: 4*
- STAT 3402 - Introduction to Probability Theory II *Units: 4*
- STAT 3502 - Statistical Inference I *Units: 4*
- STAT 3503 - Statistical Inference II *Units: 4*
- STAT 4401 - Introduction to Stochastic Processes *Units: 4*

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Multimedia, M.A.

Program Description

The Multimedia master's degree is a unique interdisciplinary program that focuses on the creative and technical aspects of new technology to create, control, deliver, and present meaningful content in a variety of interactive forms. This degree draws upon elements from a number of fields, including art, computer science, education, business, and telecommunications.

The Multimedia graduate program mirrors real-world conditions by emphasizing teamwork and project oriented goals. Students learn the skills needed to adapt quickly to new environments, a valuable asset for any profession. Because multimedia is a rapidly developing and rapidly changing field, the program focuses as much on the enduring creative processes as on the transient technology.

The Multimedia master's is a two-year degree program. Most coursework is offered in the evening. During the first year, students develop a theoretical foundation in multimedia technology, enhance their creative skills and learn to work effectively in teams. During the second year, small teams of students with various backgrounds and talents create innovative, professional-quality, interactive multimedia projects. Ideas for group projects can originate from students, faculty, or external sources. Many of our student projects have won national and international awards.

Students in the Multimedia graduate program enjoy a number of benefits including small student-teacher ratios and a dedicated interdisciplinary faculty. Thesis project students have 24-hour access to their own professional quality multimedia production studio. These facilities are well equipped and maintained with the latest technology.

Student Learning Outcomes

Students graduating with an M.A. in Multimedia from Cal State East Bay will be able to:

- Demonstrate competency in digital imaging, and interactive, web, video, and audio production;
- Research and critically assess new developments in the field of multimedia at both the cultural and the technical level;
- Show an understanding of the effects of media and the evolution of information across a variety of media types; and
- Produce an interactive thesis project that demonstrates a novel and/or creative use of a single or combination of interactive technologies, with written documentation of a professional standard, by working within a collaborative team.

Career Opportunities

The Multimedia graduate program prepares students for successful careers in the new and thriving multimedia industry. As the only multimedia master's program in the state, it leads the way in training future multimedia producers and artists. Graduates can seek employment in positions where they work in teams or individually to produce artistic and commercial multimedia materials. Potential places of employment include film and video studios, graphic and exhibition design studios, production and post-production houses, publishers, corporate training and communication groups, support groups for scientific visualization, support groups for business presentation, and support groups for educational institutions.

Added career-oriented features of the Multimedia graduate program are its location in the San Francisco Bay Area, home to the hottest interactive digital media industry in the world.

Faculty

The Multimedia Graduate Program is administered by a committee comprised of faculty members from the Departments of Art and Music from within the College of Letters, Arts, and Social Sciences.

Admission

Applicants are individually evaluated for admission to the Multimedia graduate program using the following criteria:

- A minimum GPA of 3.0 in the last 90 units of undergraduate work
- A portfolio of work reflecting the applicant's talents and abilities in digital and interactive media
- Evidence of professional experience in related fields

In addition to submitting a university application and application fee to the Admissions Office, applicants must complete a departmental application and submit it along with a statement of purpose, resume, work sample, two reference letters, and copies of academic transcripts. Applicants are selected by an admissions panel of the Multimedia Program Committee.

Students are admitted for the Fall quarter only. See the Multimedia Graduate Program website at multimedia.csueastbay.edu for the application deadline. No entrance exam is required for admission; however, international students must take the TOEFL exam and pass with a score of 213 or better.

Applicants who have not completed all prerequisite requirements may be placed in "Conditionally Classified Graduate" status if they can demonstrate the ability to complete these requirements.

Requirements for Continuation

Once admitted to the program, students must satisfy further requirements, e.g., they must satisfy the University Writing Skills Requirement. Students who have completed all the prerequisite requirements and the University Writing Skills Requirement are given "Classified Graduate" status. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661. Advancement to Candidacy is a university requirement for graduation. A student with "Classified Graduate" status may apply for Advancement to Candidacy after completing at least 20 quarter units towards the master's degree with a grade of "B" or higher in all classes. Before being Advanced to Candidacy, a student's complete course of study and progress must be approved by the Multimedia Program Committee.

Curricular Requirements (52 units)

I. Required Courses (44 units)

- MM 6100 - Tech I: Principles of Digital Multimedia *Units: 4*

- MM 6101 - Multimedia Seminar *Units: 4*
- MM 6102 - Application of Learning Theories to Multimedia Design *Units: 4*
- MM 6103 - Business Basics in Multimedia *Units: 4*
- MM 6110 - Tech II: Multimedia Network and Hardware Development *Units: 4*
- MM 6120 - Tech III: Multimedia Software Development *Units: 4*
- MM 6805 - Forum *Units: 1*
- MM 6860 - Introduction to Multimedia Project Development *Units: 4*
- MM 6870 - Multimedia Development I *Units: 4*
- MM 6880 - Multimedia Development II *Units: 4*
- MM 6899 - Project *Units: 4*

II. Electives (8 units)

Select eight units of electives under advisement of graduate coordinator.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter of this catalog. These requirements include the 39-unit residence requirement, the five-year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 GPA, and the University Writing Skills requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Music, M.A.

Program Description

The Master of Arts degree in Music is designed for those individuals pursuing careers as public or private school teachers for professional performers and composers, for school and college music teachers who wish to increase their professional effectiveness, and for those who plan further music study at the doctoral level. Courses emphasize scholarly performance and include in-depth work and research in the student's major field of interest. The ultimate goal of the Department of Music is to develop well-informed performers, independent scholars, and inspired teachers.

Student Learning Outcomes

Students graduating with an M.A. in Music from Cal State East Bay will be able to:

- Demonstrate mastery within their primary area of emphasis, i.e. performance, composition, research, conducting, or teaching;
- Apply critical and creative thinking and analytical reasoning to address complex challenges in music theory, music history, and world music;
- Work collaboratively and respectfully with other musicians in a performance context; and
- Integrate musical ideas, methods, theory, and practice, and communicate them to others clearly and persuasively, in classroom and performance settings.

Faculty

The Department of Music faculty have achieved an enviable reputation for their high degree of academic, professional, and classroom expertise. Faculty, students, and alumni are proud of the program and its success in graduating well-prepared students who have continued to work in the music field locally, nationally, and internationally. The programs of the Department of Music are fully accredited by the National Association of Schools of Music.

Areas of Emphasis

Within the M.A. degree program, students will concentrate their study in one of six areas of emphasis:

Choral Music

The Choral Music emphasis is designed for the conductor and singer with a desire to improve their skills as a leader and contributor to the choral profession. The program is based on two pillars of effective musical leadership, repertoire and communication, and the numbers of students in the program are limited so that accepted students receive ample podium time to refine conducting and rehearsal skills. Students learn the vast canon of the choral repertoire through classes, seminars, ensembles, guest artists, private lessons, analysis and performance. Students conduct music from all eras and develop vital communication skills including rehearsal techniques, vocal techniques, program planning, and an emphasis is placed on conducting. The performance of a Graduate Choral Recital is a major goal of this program.

Composition-Theory

This area of emphasis is designed for the student who wishes to continue developing toward a professional level as a composer and who wishes to continue further study of music theory. Most students in this program aim toward careers as professional composers and teachers. Some continue into doctoral programs at other universities. Composition students are given a sixty-minute lesson each week. The successful completion of a substantial original composition, accompanied by a written analysis, is required for students in this area.

Jazz Studies

The Jazz Studies emphasis is designed to teach advanced jazz improvisational and stylistic techniques in preparation for a career in Jazz performance and education. The program is intended to create well-rounded musicians and educators that will disseminate the art and history of Jazz music. Performance of a Graduate Recital is a major goal of this program. Graduate Jazz Studies students will receive a sixty-minute lesson in their jazz applied instrumental area each week of the regular quarter.

Music Education

The Music Education emphasis is designed for experienced music educators who seek to develop as leaders and scholars in the field of music education. It is also designed for students with an interest in pursuing doctoral study and/or teaching at the collegiate level. Emphasis is placed on both the practical and academic aspects of contemporary music education. This program typically culminates in a research thesis. Prospective students for this emphasis must possess a California Single Subject (music) teaching credential and at least two years of full-time K-12 music teaching experience.

Music History and Literature

This area of emphasis is designed to give sufficient academic work and background to those students who wish to continue graduate study at the doctoral level or for students wishing to teach in the areas of history, literature, and music appreciation. Classes offered by the Department of Music cover all the major historical periods and specific historical studies are offered as seminars. A student who pursues this option is expected to be able to do independent research and will complete a standard thesis.

Performance

The performance emphasis is designed to prepare the student as a professional performer or teacher through the advancement of instrumental or vocal skills and the study of selected historical, stylistic, and theoretical courses. An audition is required before a student is accepted into this area of emphasis. Performance of a Graduate Recital is a major goal of this program. Graduate performance students will receive a sixty-minute lesson each week of the regular quarter.

Scholarships

Scholarships, including the Graduate Equity Fellowships, are available for new and continuing graduate students. Contact the Department of Music office at (510) 885-3135 for more information.

Admission Requirements

Upon making application to the program, a candidate may be admitted for graduate study in the Department of Music as a "Conditionally Classified Graduate" student if: (1) the general requirements for graduate standing have been met, and (2) the student holds a baccalaureate degree with a major in music and an upper division grade point average of at least 3.0 ("B") in music.

Students wishing to enroll in the graduate program who do not have a major in music must first complete an equivalency of the Cal State East Bay B.A. degree major in Music. When the equivalency has been completed, the student will then be eligible for entrance into the graduate program, subject to the entrance requirements stated below.

All Areas

All graduate candidates must submit a Statement of Purpose and a resume or curriculum vitae. The Statement of Purpose should be no more than three pages in length (typed, double-spaced) and should describe the candidate's professional goals and aspirations. In addition, candidates are asked to submit two letters of recommendation, on letterhead, mailed directly by individuals familiar with his or her work or performance abilities.

Choral Music

Those wishing to pursue an emphasis in Choral Music must submit a video recording (DVD or online link) of at least 15 minutes of a rehearsal with a choral ensemble. You may optionally include a video of a concert performance in addition to the rehearsal video. Final candidates will be invited to campus to audition with one of the CSUEB choral ensembles. Preference will be given to candidates who apply to the Music Department by March 1.

Composition and Theory

Those wishing to pursue an emphasis in composition and theory must submit a compositional portfolio that includes at least two samples of their work written for different media, preferably with an accompanying audio or video recording. Those wishing to pursue an emphasis in music theory must submit a sample of their academic writing, preferably a thesis, term paper, or published article on a subject in music theory.

Jazz Studies

Those wishing to pursue an emphasis in jazz studies must complete an in-person audition or submit audition recordings (audio or video), preferably of a recent performance or recital.

Music Education

Those wishing to pursue an emphasis in music education must submit a copy of their California Teaching Credential and evidence of a minimum of two years fulltime teaching at the K-12th grade levels. In addition to the statement of purpose, they must also submit a video recording (DVD or online link) of at least 20 minutes of a class or rehearsal in a K-12 school.

Music History and Literature

Those wishing to pursue an emphasis in music history must submit a sample of their academic writing, preferably a thesis, term paper, or published article on a subject in musicology or ethnomusicology that demonstrate their research and writing skills and their abilities to think critically;

Performance

Those wishing to pursue an emphasis in performance must complete an in-person audition or submit audition recordings (audio or video), preferably of a recent performance or recital.

Graduate Music Advisory Examinations

The Graduate Music Advisory Examinations, given by the Department of Music, must be taken prior to the beginning of the student's first quarter in residence. These examinations include dictation, theory, history and literature, and piano proficiency. Contact the department for the date of these examinations.

Classification in the Program

A student may be a "Classified Graduate" student if (s)he:

- Has completed all undergraduate deficiencies;
- Has completed at least 12 quarter units in residence at the 6000-level applicable toward the master's degree, including Music 6000, with a minimum grade point average of 3.0;

- Has passed the Graduate Advisory Examinations in basic piano proficiency, ear training, music history and literature, and music theory. The Graduate Advisory Examinations must be passed by the time the student has completed 20 units applicable to the degree or the student will be dropped from the program;
- As a graduate student pursuing the history-literature area of emphasis, has demonstrated reading ability in French, German, or Italian; other languages may be substituted by approval of the department;
- Has fulfilled the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Advancement to Candidacy

A student who holds "Classified Graduate" standing may be considered for Advancement to Candidacy when (s)he:

- Has filed a study program for the completion of the degree which has been approved by the departmental Graduate Studies Committee;
- If electing the performance emphasis, has successfully demonstrated a graduate standard of excellence before an auditions committee.

Degree Requirements

To be eligible for the Master of Arts degree a student must:

- Be Advanced to Candidacy;
- Complete 45 units of approved courses of which:
 - 32 must be completed in residence;
 - 24 must be at the 6000 level;
- A minimum of 9 units must be in one of the four possible areas of emphasis: composition-theory, history-literature, music education, or performance;
- Not more than 12 units of applied music will be counted in the performance area of emphasis;
- Up to, but no more than 3 units of applied music, when approved by an advisor, may be applied toward degree requirements by candidates outside the performance area of emphasis;
- At least 3 units in addition to those in the area of emphasis must be completed in each of the following areas: composition-theory, history-literature, and music education;
- Up to, but no more than 9 units of study outside of music may be counted toward the degree (these units must be approved by a graduate advisor and must be at the 3000 level or above);
- Performance emphasis candidates must complete 3 units of performance activities (large and/or chamber ensembles).
- Present a thesis or project in one of the following forms:
 - In the history-literature area, a standard research thesis (University Thesis, MUS 6910);
 - In the composition-theory area, an original composition;
 - In the music education area, either a standard research thesis (University Thesis, MUS 6910) or a project (Project, MUS 6899);
 - In the performance area, a final graduate recital;
- Pass both written and oral examinations upon completion of all coursework.

The candidate must observe the specific departmental requirements stated here and in the Handbook for Music Majors.

Curricular Requirements (45 units)

I. Core Classes (12-15 units)

- MUS 6000 - Seminar in Bibliography and Research Methods *Units: 3*
- One course in Theory *Units: 3*
- One course in History/Literature *Units: 3*
- One course in Music Education *Units: 3*
- MUS 6610 - Graduate Applied Study: Piano *Units: 1-3* - MUS 6699 - Graduate Applied Music *Units: 0-3*

II. Other Required Studies in Music (9-18 units)

- Emphasis area classes *Units: 9-12*

- University Thesis or Project *Units: 0-6*

III. Electives (12-21 units)

- In Music *Units: 6-12*
- In Music, or, with approval, outside of Music *Units: 9*
- Pass written and oral examinations *Units: 0*

Performance Activities

Graduate students with a performance emphasis are required to take a minimum of 3 units of in performance activities during their time in residency in the program. These students may apply a maximum of 6 units toward the 45 quarter units required for the M.A. degree in Music. Graduate students in other areas of emphasis are allowed, with prior approval of the Graduate Coordinator, to apply up to 3 units of credit in performance toward the 45 quarter units required for the M.A. degree in Music.

Upper Division Music Courses Acceptable for Master's Degree

Before enrolling in any undergraduate course the graduate student should be aware of the minimum requirement of 6000-level units and should consult his or her advisor in the department.

- MUS 4054 - Instrumentation *Units: 4*
- MUS 4435 - Seminar in Public School Instrumental Teaching Techniques *Units: 3*
- MUS 4440 - Seminar in Public School Choral Teaching Techniques *Units: 3*
- MUS 4445 - Seminar in Elementary Classroom Music Teaching Techniques *Units: 3*

3000-level courses may be acceptable for the master's degree with approval of the graduate advisor.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. The candidate is responsible for seeing an advisor and planning a tentative program, for completing the prerequisites to program approval, and for taking the Graduate Advisory Examinations.

Public Administration, Health Care Administration Option, M.P.A.

Public Administration, MPA

Program Description

The Department of Public Affairs and Administration at Cal State East Bay offers a program of coursework leading to a Master of Public Administration (MPA) degree. The department also offers an M.S. in Health Care Administration (see the Programs of Study section of this catalog). The following pages only describe the MPA degree program.

Public Administration is a rich and challenging multi-disciplinary field drawing from sociology, anthropology, philosophy, psychology, economics, and urban and organizational studies. The master's degree program provides students with a grounding in major philosophical and social science thinking about the nature of organizations; it helps students to build the intellectual and practical tools they will need to become effective organizational leaders in the public and non-profit sectors. The MPA program is designed to increase the personal and professional effectiveness of people working in public, voluntary, and private organizations. The purpose of the program is to prepare individuals for leadership positions in various kinds of organizations with a sense of commitment to social purpose, the public interest, and effective public problem-solving.

The program proceeds on several assumptions: (1) many pressing problems of society must be dealt with through public agencies, and these agencies must be staffed by well-prepared public administrators; (2) public agencies should be more oriented toward the public interest and be more

client-centered than is generally the case at present; (3) public agencies should be humanistically oriented, encouraging personal contribution, growth, and improvements in the quality of working life; (4) public agencies should nurture and support a critical awareness on the part of public administrators, leading to an ability to challenge and change administrative practice; and (5) public administrators need to find creative and innovative solutions to the problems of providing quality public services in times of resource scarcity.

The department strives to expand the meaning of public administration to include the theory and practice of administration in non-profit and community organizations. Overall, emphasis is placed upon developing student sensitivities to a wide variety of human, social, and organizational realities in order to assist public organizations in formulating and obtaining their goals and striving toward responsible social change. In sum, the faculty believes the challenge of the changing post-industrial era is best met by humanizing governments, by strengthening their capacities for intelligent policy analysis and effective action on behalf of the public interest, and by encouraging in public administrators a welcoming attitude toward learning, creativity, and innovation.

Student Learning Outcomes

Students graduating with a MPA will be able to:

- Lead and manage in public governance while demonstrating an understanding of the role of theory in public governance and the application of these theories toward administrative inquiry;
- Participate in and contribute to the policy process;
- Analyze, synthesize, think critically, solve problems, and demonstrate an understanding of interpretive and quantitative research methodologies;
- Articulate and apply a public service perspective;
- Communicate and interact productively with a diverse and changing workforce and citizenry.

Career Opportunities

The MPA program prepares students for careers in government organizations at the federal, state, and local levels as well as in community organizations and the non-profit sector. The program also offers an excellent preparation for doctoral level study for those seeking careers in university teaching and research. The curriculum offers students opportunities to specialize in public management and public policy development, health care administration, and human resources and organizational change. Cal State East Bay MPA alumni are well represented in positions of leadership throughout the Bay Area as well as in local, state, and federal agencies in the western states.

Internships

The Department of Public Affairs and Administration sponsors an optional graduate internship program as an integral part of the master's program. The internship program provides students with an opportunity to complement their academic studies with practical administrative experience in a city, county, state, federal, or non-profit agency. The internships vary from three to nine months and average 10 to 30 hours per week. Some pay a stipend; others are on a volunteer basis. An internship is not a job placement, but an opportunity for gaining experience. Internships are for 300 hours or two quarters.

Scholarships

- Graduate Equity Fellowship
- Herman J. McKenzie Memorial Scholarship Fund
- Robert Odell Scholarship
- MPA Alumni Scholarship
- VrMeer Family Scholarship

Admission

The MPA degree program is open to applicants planning careers in public organizations who have a baccalaureate degree from an accredited institution. Admission will be granted based upon the Admission Committee's overall assessment of the program's admission capacity and of the applicant's qualifications and academic/career potential, using the following criteria:

- Cumulative undergraduate GPA of at least 2.5;
- Statement of Purpose in pursuing the MPA degree (a 1-2 page essay double-spaced, explaining who you are, your career goals and how the MPA degree will help you achieve those goals and why you believe you will be successful in the program);

- Two letters of academic and/or professional recommendation (on letterhead - company or educational institution stationery). The letter writers should include how they know you, if they think you would be successful in the program and why they think that;
- Professional resume/vita, and
- All undergraduate/graduate transcripts. (These must be sent directly to University Admissions NOT the Department.)

All applicants must submit an online Graduate Admission application declaring Public Administration as a degree objective, and transcripts, at www.csumentor.edu along with a non-refundable fee. In addition, applicants must also submit a statement of purpose, 2 letters of reference and a resume directly to the Department of Public Affairs and Administration at the following address: CSUEB: Dept of Public Affairs and Administration, 25800 Carlos Bee Blvd., MI 4122, Hayward, CA 94542-3040.

Please review the detailed application instructions on the Department's website at <http://www20.csueastbay.edu/class/departments/publicadmin/publicadmin/criteria.html>.

Student Standing and Progress Toward the Degree

There are three categories of student status which reflect student progress toward the degree: "Conditionally Classified Graduate" student, "Classified Graduate" student, and Advancement to Candidacy.

Students achieve "Conditionally Classified Graduate" status when they have been admitted to the MPA degree program, but have not yet completed the requirements for "Classified Graduate" status in the M.P.A. degree program.

These requirements are: PUAD 4800 Public Administration and Society (with a grade of "B" or better), PUAD 4830 Organization Theory and Human Behavior (with a grade of "B" or better), PUAD 4840 Fundamentals of Information Management in the Public Sector (with a grade of "B" or better), and PUAD 5000 Philosophy of Public Administration (with a grade of "B" or better).

- Students achieve "Classified Graduate" status when they have satisfactorily completed the four foundation courses for the MPA degree program or their equivalents, and satisfied the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.
- Students are Advanced to Candidacy when they have completed the core courses with a 3.0 or better cumulative GPA.

Capstone Experience

Comprehensive Exam, Departmental or University Thesis

Students have a choice of completing the program with a Departmental or University Thesis or Comprehensive Examination. Students must satisfy the University Writing Skills Test requirements before they will be allowed to enroll in PUAD 6901, PUAD 6909, or PUAD 6910. Students who wish to take the Comprehensive Examination must first enroll in PUAD 6901, Graduate Synthesis (4 units). Upon the successful completion of the course, they become eligible to take the Comprehensive Exam, which is a proctored essay exam. Students who fail the Comprehensive Exam may either retake PUAD 6901 and the Exam one additional time, or they may instead decide at that time to enroll in PUAD 6909, Departmental Thesis, or PUAD 6910, University Thesis.

Students who choose to take PUAD 6909, Departmental Thesis, or PUAD 6910, University Thesis, should be aware of the procedural differences between a departmental and university thesis. While each carries 4 units of graduate credit, the university thesis requires a two-faculty member committee. The University Thesis Committee meets as called by the student or the faculty and includes the submission of the thesis to the University for final approval and binding. Two bound copies are required (one for the department and one for the university library). The university thesis deadline dates are listed at: Academic Calendar. A departmental thesis is directed by one faculty member. Students completing the departmental thesis may either sign up individually with a faculty advisor or meet in a scheduled graduate course. Two copies of the departmental thesis are required for the department.

Grades of "SP" (Satisfactory Progress) may be given for a thesis that is not completed at the end of the quarter. The "SP" grade must be removed within five years or it will become an "F."

Granting the Degree

Upon satisfaction of all requirements for the degree, the department will recommend that the candidate be granted the Degree of Master of Public Administration. Students must file for graduation by the second week of the quarter prior to the quarter in which they expect to graduate.

Degree Requirements (48 units)

The program requires completion of 48 quarter units beyond the foundation courses, at least 35 units of which must be completed in residence at CSUEB:

- Core Courses: 20 units
- Required and Elective Courses in an Option Area: 24 units
- Capstone Course: 4 units

The MPA program requires completion of 48 quarter units, distributed among core courses; required and elective courses in an option area; and the graduate synthesis or the departmental or university thesis. Of these, at least 35 units must be completed in residence at CSUEB (transfer units are limited to 13 quarter units); at least 24 units must be in courses in the 6000 series. No course numbered 1000 to 2999 (or equivalent if taken elsewhere) may be used as part of the 48-unit graduate degree program.

No more than two courses per quarter may be completed in the MPA program. Courses are offered in all quarters, including the summer quarter. Students are admitted as a cohort and follow a degree completion roadmap designed for that cohort.

A cumulative grade point average of 3.0 must be maintained in all 48 quarter units taken to satisfy the degree requirements. Students who fail to maintain progress by falling below a cumulative 3.0 GPA in their graduate courses for two consecutive quarters will be academically disqualified from the university. All graduate degree requirements must be completed within 5 years.

Students accumulating more than 8 units of work graded "I" (Incomplete) may not register for further courses applicable to the degree until the "I" grades are removed.

Core Courses (20 units)

All students must take the following five courses prior to taking the option courses:

- PUAD 6801 - Public Policy Formulation *Units: 4*
- PUAD 6811 - Human Organizations and Social Realities *Units: 4*
- PUAD 6812 - Changing Human Organizations *Units: 4*
- PUAD 6831 - Research Methods in Public Administration I *Units: 4*
- PUAD 6832 - Research Methods in Public Administration II *Units: 4*

Note: PUAD 6811 must be completed prior to taking PUAD 6812. However, PUAD 6831 and PUAD 6832 are not sequential and are not required to be taken in sequence.

Capstone Course (4 units)

Students are required to take one of the following:

- PUAD 6901 - Graduate Synthesis *Units: 4* and Comprehensive Exam.
- PUAD 6909 - Departmental Thesis *Units: 1-4*
- PUAD 6910 - University Thesis *Units: 1-4*

Health Care Administration Option (24 units)

Designed for students who are preparing for an administration, management or policy analyst career in the health care field. The option area focuses on health policy, health services delivery, and management issues in a variety of health care organizations.

Option includes four courses designated to the option, and 8 units of electives which must be taken inside the department.

Required courses (16 units)

- HCA 6200 - US Health Care System *Units: 4*
- HCA 6250 - Strategic Management of Health Care Organizations *Units: 4*
- HCA 6260 - Health Care Policy Analysis *Units: 4*
- HCA 6270 - Health Care Management *Units: 4*

Electives (8 units)

Select two from the following:

- HCA 6201 - Introduction to Health Informatics *Units: 4*
- HCA 6202 - Project and Change Management in Health Informatics *Units: 4*
- HCA 6210 - Leadership and Change in Health Care Organizations *Units: 4*
- HCA 6225 - Organization Theory and Behavior in Health Care *Units: 4*
- HCA 6240 - Health Care Financing and Budgeting *Units: 4*
- HCA 6275 - Evolution of Managed Health Care *Units: 4*
- HCA 6280 - Legal and Ethical Issues in Health Care *Units: 4*
- HCA 6290 - Health Care Quality Assessment and Improvement *Units: 4*

Other Degree Requirements

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Public Administration, Public Management and Policy Analysis Option, M.P.A.

Public Administration, MPA

Program Description

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The program proceeds on several assumptions: (1) many pressing problems of society must be dealt with through public agencies, and these agencies must be staffed by well-prepared public administrators; (2) public agencies should be more oriented toward the public interest and be more client-centered than is generally the case at present; (3) public agencies should be humanistically oriented, encouraging personal contribution, growth, and improvements in the quality of working life; (4) public agencies should nurture and support a critical awareness on the part of public administrators, leading to an ability to challenge and change administrative practice; and (5) public administrators need to find creative and innovative solutions to the problems of providing quality public services in times of resource scarcity.

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- Participate in and contribute to the policy process;
- Analyze, synthesize, think critically, solve problems, and demonstrate an understanding of interpretive and quantitative research methodologies;

- Articulate and apply a public service perspective;
- Communicate and interact productively with a diverse and changing workforce and citizenry.

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Internships

The Department of Public Affairs and Administration sponsors an optional graduate internship program as an integral part of the master's program. The internship program provides students with an opportunity to complement their academic studies with practical administrative experience in a city, county, state, federal, or non-profit agency. The internships vary from three to nine months and average 10 to 30 hours per week. Some pay a stipend; others are on a volunteer basis. An internship is not a job placement, but an opportunity for gaining experience. Internships are for 300 hours or two quarters.

Scholarships

- Graduate Equity Fellowship
- Herman J. McKenzie Memorial Scholarship Fund
- Robert Odell Scholarship
- MPA Alumni Scholarship
- VrMeer Family Scholarship

Admission

The MPA degree program is open to applicants planning careers in public organizations who have a baccalaureate degree from an accredited institution. Admission will be granted based upon the Admission Committee's overall assessment of the program's admission capacity and of the applicant's qualifications and academic/career potential, using the following criteria:

- Cumulative undergraduate GPA of at least 2.5;
- Statement of Purpose in pursuing the MPA degree (a 1-2 page essay double-spaced, explaining who you are, your career goals and how the MPA degree will help you achieve those goals and why you believe you will be successful in the program);
- Two letters of academic and/or professional recommendation (on letterhead - company or educational institution stationery). The letter writers should include how they know you, if they think you would be successful in the program and why they think that;
- Professional resume/vita, and
- All undergraduate/graduate transcripts. (These must be sent directly to University Admissions NOT the Department.)

All applicants must submit an online Graduate Admission application declaring Public Administration as a degree objective, and transcripts, at www.csumentor.edu along with a non-refundable fee. In addition, applicants must also submit a statement of purpose, 2 letters of reference and a resume directly to the Department of Public Affairs and Administration at the following address: CSUEB: Dept of Public Affairs and Administration, 25800 Carlos Bee Blvd., MI 4122, Hayward, CA 94542-3040.

Please review the detailed application instructions on the Department's website at <http://www20.csueastbay.edu/class/departments/publicadmin/publicadmin/criteria.html>.

Student Standing and Progress Toward the Degree

There are three categories of student status which reflect student progress toward the degree: "Conditionally Classified Graduate" student, "Classified Graduate" student, and Advancement to Candidacy.

Students achieve "Conditionally Classified Graduate" status when they have been admitted to the MPA degree program, but have not yet completed the requirements for "Classified Graduate" status in the M.P.A. degree program.

These requirements are: PUAD 4800 Public Administration and Society (with a grade of "B" or better), PUAD 4830 Organization Theory and

Human Behavior (with a grade of "B" or better), PUAD 4840 Fundamentals of Information Management in the Public Sector (with a grade of "B" or better), and PUAD 5000 Philosophy of Public Administration (with a grade of "B" or better).

- Students achieve "Classified Graduate" status when they have satisfactorily completed the four foundation courses for the MPA degree program or their equivalents, and satisfied the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.
- Students are Advanced to Candidacy when they have completed the core courses with a 3.0 or better cumulative GPA.

Capstone Experience

Comprehensive Exam, Departmental or University Thesis

Students have a choice of completing the program with a Departmental or University Thesis or Comprehensive Examination. Students must satisfy the University Writing Skills Test requirements before they will be allowed to enroll in PUAD 6901, PUAD 6909, or PUAD 6910. Students who wish to take the Comprehensive Examination must first enroll in PUAD 6901, Graduate Synthesis (4 units). Upon the successful completion of the course, they become eligible to take the Comprehensive Exam, which is a proctored essay exam. Students who fail the Comprehensive Exam may either retake PUAD 6901 and the Exam one additional time, or they may instead decide at that time to enroll in PUAD 6909, Departmental Thesis, or PUAD 6910, University Thesis.

Students who choose to take PUAD 6909, Departmental Thesis, or PUAD 6910, University Thesis, should be aware of the procedural differences between a departmental and university thesis. While each carries 4 units of graduate credit, the university thesis requires a two-faculty member committee. The University Thesis Committee meets as called by the student or the faculty and includes the submission of the thesis to the University for final approval and binding. Two bound copies are required (one for the department and one for the university library). The university thesis deadline dates are listed at: Academic Calendar. A departmental thesis is directed by one faculty member. Students completing the departmental thesis may either sign up individually with a faculty advisor or meet in a scheduled graduate course. Two copies of the departmental thesis are required for the department.

Grades of "SP" (Satisfactory Progress) may be given for a thesis that is not completed at the end of the quarter. The "SP" grade must be removed within five years or it will become an "F."

Granting the Degree

Upon satisfaction of all requirements for the degree, the department will recommend that the candidate be granted the Degree of Master of Public Administration. Students must file for graduation by the second week of the quarter prior to the quarter in which they expect to graduate.

Degree Requirements (48 units)

The program requires completion of 48 quarter units beyond the foundation courses, at least 35 units of which must be completed in residence at CSUEB:

- Core Courses: 20 units
- Required and Elective Courses in an Option Area: 24 units
- Capstone Course: 4 units

The MPA program requires completion of 48 quarter units, distributed among core courses; required and elective courses in an option area; and the graduate synthesis or the departmental or university thesis. Of these, at least 35 units must be completed in residence at CSUEB (transfer units are limited to 13 quarter units); at least 24 units must be in courses in the 6000 series. No course numbered 1000 to 2999 (or equivalent if taken elsewhere) may be used as part of the 48-unit graduate degree program.

No more than two courses per quarter may be completed in the MPA program. Courses are offered in all quarters, including the summer quarter. Students are admitted as a cohort and follow a degree completion roadmap designed for that cohort.

A cumulative grade point average of 3.0 must be maintained in all 48 quarter units taken to satisfy the degree requirements. Students who fail to maintain progress by falling below a cumulative 3.0 GPA in their graduate courses for two consecutive quarters will be academically disqualified from the university. All graduate degree requirements must be completed within 5 years.

Students accumulating more than 8 units of work graded "I" (Incomplete) may not register for further courses applicable to the degree until the "I" grades are removed.

Core Courses (20 units)

All students must take the following five courses prior to taking the option courses:

- PUAD 6801 - Public Policy Formulation *Units: 4*
- PUAD 6811 - Human Organizations and Social Realities *Units: 4*
- PUAD 6812 - Changing Human Organizations *Units: 4*
- PUAD 6831 - Research Methods in Public Administration I *Units: 4*
- PUAD 6832 - Research Methods in Public Administration II *Units: 4*

Note: PUAD 6811 must be completed prior to taking PUAD 6812. However, PUAD 6831 and PUAD 6832 are not sequential and are not required to be taken in sequence.

Capstone Course (4 units)

Students are required to take one of the following:

- PUAD 6901 - Graduate Synthesis *Units: 4* and Comprehensive Exam.
- PUAD 6909 - Departmental Thesis *Units: 1-4*
- PUAD 6910 - University Thesis *Units: 1-4*

Public Management and Policy Analysis Option (24 units)

Required Courses (16 units)

- PUAD 6815 - Ethics and Administrative Responsibility *Units: 4*
- PUAD 6842 - Governmental Budgeting *Units: 4*
- PUAD 6850 - Human Resource Management in the Public Sector *Units: 4*
- PUAD 6864 - Managing Public Organizations *Units: 4*

Electives (8 units)

Select two from the following:

- PUAD 6762 - Group Procedures and Facilitation *Units: 4*
- PUAD 6802 - Seminar in Public Policy Implementation *Units: 4*
- PUAD 6809 - Seminar in Public Program Evaluation *Units: 4*
- PUAD 6830 - Advanced Information Management in Public Organizations *Units: 4*
- PUAD 6854 - Seminar in Public Labor Relations *Units: 4*
- PUAD 6869 - Topics in Public Management *Units: 4*
- PUAD 6893 - Internship in Public Administration *Units: 1-4*
- PUAD 6999 - Issues in Public Administration *Units: 4*

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills requirement.

Recreation and Tourism, M.S.

Program Description

In our very diverse world, managing organizations is increasingly more complex. A Master's of Science in Recreation and Tourism will provide an in-depth to understanding of the fast moving, increasingly-complex challenges in the world of recreation. Through exploring the literature and theories, and how to scientifically gather data to make informed decisions, graduates will be better prepared for the world's legal, personal, and ethical dilemmas presented in their work environments. This program is offered fully online. It will make use of interactive, online learning activities designed to challenge and inspire growth. Students "come" to "class" at times when they are ready to learn-not at a specific time in the evening after working all day. It is not a self-paced program. Discussions happen asynchronously. One might log on at 10 p.m. or find a classmate is awake and doing work online at 4 a.m. after he got off the night shift. This way of learning is different. You are not only the receiver of knowledge, but now you are asked to be more actively engaged in your own learning. You will be asked not only to absorb, but also to discover and create knowledge. The role of the instructor is the designer of these learning challenges. This is much more like what happens in the real world of work.

The program is designed to provide a strong intellectual core, but also to allow specialization via projects.

This program is 45 units, 10 courses of 4.5 units each and two courses will be offered each quarter. It is possible to complete this program in 5 quarters, although some students will want more time to accommodate their work schedules. The degree must be completed within 5 years.

The faculty is committed to students' success, both in work and graduate school. The courses will be offered once a year, 2 courses each of all four quarters.

Student Learning Outcomes

Students graduating with an M.S. in Recreation and Tourism from Cal State East Bay will be able to:

- Analyze and use evidence-based research and technology to identify challenges and generate effective, sustainable solutions related to personnel, program and logistics areas; and provide relevant references.
- Demonstrate significant knowledge of exemplary leadership, and teamwork strategies; innovative and effective management skills; and evaluation of service quality and consumer needs through professional experience.
- Articulate clearly (speak and write) the ethical, theoretical, philosophical, and current management practices and administrative foundations of the profession.
- Develop a systems approach to create a culture of dignity and respect among individuals, communities, and organizations.

Career Possibilities

- Recreation Program Manager
- Youth Sports Manager
- Event Manager
- Meetings and Conference Manager
- Aquatics Manager
- Senior Center Manager
- Resort Manager
- Retirement Community Program Director
- Camp Director
- Preschool Director
- After-school Director
- Country Club Manager

Features

Our student-centered department has designed this masters degree for working adults. All of our courses are offered totally online. We are dedicated to helping you realize your dreams. Our friendly, accessible faculty will advise you about meeting all requirements in the most efficient manner. We have excellent industry contacts and can help you plan your future advancement in our profession. All our faculty have been Leisure and Hospitality industry professionals.

Admission

Prerequisites and Criteria for admission:

- Baccalaureate degree from an accredited university. It is expected that most students applying for this program will have a BS in Recreation.
- If your undergraduate degree is not in Recreation or Hospitality, you may need some foundational courses. This will be determined when your transcript and work experience are evaluated by a graduate advisor or the department chair.
- GPA of 2.75 in last 60 hours of course work is required.
- Must have 2 years of work experience in the field
- Acceptable TOEFL minimum score of 550 (International Students) or above(237 on the Computer-Based TOEFL), or by posting an official transcript showing graduation with a bachelor's degree from a U.S. college or university where English is the principal language of instruction, or by an official letter from the college or university certifying that English is the language of instruction.
- Three letters of recommendation
- Official transcripts from all institutions of higher learning attended
- Current resume

In addition to the University Graduate and Post-Baccalaureate Application, all applicants should submit to the department

- personal statement explaining their reasons for wanting to pursue the M.S. in Recreation and Tourism degree,
- an up-to-date resume detailing professional and academic achievements, and
- three letters of recommendations from those who know them best in a professional light. At least one should be from a superior (immediate supervisor) and one should come from someone who knows their academic abilities.

Admission to the University and admission to the M.S. in Recreation and Tourism degree are separate but simultaneous steps.

Advancement to Candidacy

There are three categories of student status, which reflect student progress toward the degree: "Conditionally Classified Graduate" student, "Classified Graduate" student, and "Advancement to Candidacy" student.

1. Students achieve "Conditionally Classified Graduate" status when they have been admitted to the M.S. in Recreation and Tourism degree program, but have not yet completed the prerequisites for "Classified Graduate" status in the M.S. in Recreation and Tourism.
2. Students achieve "Classified Graduate" status when they have satisfied the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.
3. Students are advanced to Candidacy when they have completed the required courses with a 3.0 or better GPA.

Note: Students who fail to maintain progress by falling below a 3.0 GPA in their graduate courses for two or more consecutive quarters will be academically disqualified from the university. All graduate degree requirements must be completed within 5 years.

Granting the Degree

Upon satisfaction of all requirements for the degree, the department will recommend that the candidate be granted the Degree of Master of Recreation and Tourism. Students must file for graduation by the second week of the quarter prior to the quarter in which they expect to graduate.

Master's Requirements

The Masters of Science in Recreation and Tourism consists of 45 units.

Required Courses (45 units)

- REC 6000 - Research Methods in Leisure Studies *Units: 4.5*
- REC 6100 - Philosophical Foundations and Theories of Leisure *Units: 4.5*
- REC 6200 - Strategies in Staff Supervision *Units: 4.5*
- REC 6300 - Organizational Development in Leisure *Units: 4.5*
- REC 6400 - Current Management Topics in Leisure *Units: 4.5*
- REC 6500 - Critical Analysis of Leisure Research *Units: 4.5*
- REC 6601 - Planning, Development, and Management of Sustainable Tourism *Units: 4.5*
- REC 6700 - Advanced Social Justice and Professional Ethics *Units: 4.5*
- REC 6800 - Strategic Leadership in Leisure *Units: 4.5*
- REC 6901 - Graduate Synthesis *Units: 4.5*

or

- REC 6909 - Departmental Thesis *Units: 4.5*

Note:

Students completing the departmental thesis may either sign up individually or with a faculty advisor. Departmental thesis is directed by one faculty member. Two copies of the departmental thesis are required for the department.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate/Post-Baccalaureate Admission and Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, and the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Social Work, M.S.W.

Program Description

The Department of Social Work offers graduate study leading to the degree Master of Social Work (M.S.W.). This degree program is designed to train social workers for leadership and direct practice positions in social work, and is accredited by the Council on Social Work Education. The program has a multicultural focus which prepares social work students to work in both non-profit and public agencies and to be proficient in working with diverse multicultural populations in urban and suburban communities.

The M.S.W. program is a full-time two year program for students who have recently completed a baccalaureate program, as well as for those who have been working in social work agencies and want to upgrade their skills and professional preparation.

The objective of the M.S.W. program is to address the growing need for social workers to work with individuals, families, groups, and organizations charged with responding to societal problems such as poverty, family instability, mental illness, child welfare, aging, and urban renewal. An additional focus is to work with underserved populations in ways that enable and empower them to participate in the social work change process. The program will also prepare individuals to be agents for change and to work effectively in an increasingly complex, culturally and racially diverse society and to understand and respond to racism, sexism, homophobia, and other forms of oppression that create and maintain barriers to an individual's well-being and effective participation in American society.

Students in the M.S.W. program will develop the analytical skills needed to explore new models of social work service delivery and organizational design. In addition, they will have an extensive field experience in which they will work with skilled professional social workers and apply the analytical and social work skills learned in the classroom.

Student Learning Outcomes

Students graduating with an M.S.W. from Cal State East Bay will be able to:

- Uphold the core values and ethical principles and standards of the social work profession as codified in the National Association of Social Workers' Code of Ethics. Values and Ethics.
- Conduct oneself autonomously in the professional social work role, including understanding personal values and biases and knowing their impact on clients, engaging in ongoing development of professional knowledge and skills, and exercising use of self in order to engage and collaborate effectively. Professional Use of Self.
- Use critical thinking skills in the analysis and synthesis of information, including in the application of evidence-based practice and theoretical material and in modifying intervention plans as needed. Critical Thinking and Theory for Practice.
- Advocate for clients, groups and communities in complex cultural, social and political situations. Advocacy.
- Act with self-awareness and knowledge of diverse populations, with the commitment of providing culturally competent service (cultural humility). Diversity.
- Communicate effectively orally and in writing across diverse client and social services systems. Communication.

Career Opportunities

Graduates of the M.S.W. program are prepared to work with individuals, families, groups, and organizations in both public and non-profit practice. The State of California is experiencing an acute shortage of individuals prepared for leadership roles in social work practice. The State also has a critical shortage of social workers trained at the master's level and the demand for Master level social workers is expected to increase. Other areas that need social workers include mental health services, agencies dealing with the aged, and in the juvenile justice system dealing with dual diagnosis.

Admission

The M.S.W. degree program is open to students planning a career in social work who have a baccalaureate degree from an accredited institution and who have earned an overall grade point average of 2.8 (on a 4.0 scale) in their last 90 quarter units (60 semester units) of undergraduate work. Students with a GPA below 2.8 may be admitted based on an evaluation of their student profile, including work experience, resume, letters of recommendation, and personal statement (see below).

In addition to the "University Graduate and Post-baccalaureate Application," all applicants should submit:

- A completed departmental application form;
- A personal statement (2-3 pages) with their application stating their reasons for pursuing the M.S.W. degree, describing their relevant work experience, and explaining their past academic performance;
- Three letters of recommendation (letters from prior instructors preferred); and
- A resume. Successful experience in social work or social work-related positions will be considered in evaluating applications.

Admission to the university and admission to the M.S.W. degree program are separate steps. It is suggested that application for admission to the university (Part A of the application) be filed together with the form for entry into the degree program (Part B of the application).

Advising

Students who are accepted into the department will normally be admitted in "Conditionally Classified Graduate" status until satisfaction of all prerequisites and the University Writing Skills Requirement is documented for the Social Work office, at which time a change to "Classified Graduate" status will be requested by the department. The student is assigned an official advisor from the faculty of the department and must consult his or her advisor prior to registration for each quarter. The student should maintain close contact at all times with the advisor for advice and information.

Student Standing and Progress toward the Degree

- There are three categories of student status that reflect your progress toward the degree. You are in "Conditionally Classified Graduate" status when you have been admitted to the M.S.W. degree program, but have not yet completed the prerequisites for the "Classified Graduate" status in the M.S.W. degree program.
- You achieve "Classified Graduate" status when you have satisfactorily completed all the prerequisites for the M.S.W. degree program and satisfied the University Writing Skills Requirement. (See "Prerequisites for 'Classified Graduate' Status" below.)
- You are "Advanced to Candidacy" when you have completed the core courses with a 3.0 GPA or better.

Note: If you fail to maintain progress by falling below a 3.0 GPA in your graduate courses for two or more consecutive quarters, you will be academically disqualified from the university.

Prerequisites for "Classified Graduate" Status

As prerequisites to "Classified Graduate" status, you must satisfy the University Writing Skills Requirement and have satisfactorily completed STAT 1000 or equivalent, and a course in human biology or anatomy and physiology with a grade of "C" or better. These courses must be taken before you attempt the core graduate courses. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Advancement to Candidacy

Formal Advancement to Candidacy for the master's degree requires prior completion of the following steps:

- Successful completion of the HBSE, Generalist Practice Sequence, and Field Practicum sequences, as well as the Social Policy and Introduction to Social Work Research courses.
- Successful completion of all required departmental prerequisites.
- Maintenance of a 3.0 or better GPA in all departmental coursework and overall coursework.
- Recommendation by the student's advisor who has reviewed the student's record and affirmed that the student has met academic and professional conduct standards.

Cause for Dismissal from Program

Students may be dismissed from the program at any time "for cause." "For cause" includes, but is not limited to, poor academic or fieldwork performance, as well as behavior that is destructive to students or faculty, and/or interferes with the educational environment, and/or represents a threat to potential clients. "For cause" also includes student behaviors that are inconsistent with the legal, ethical, and/or personal responsibilities of professional social workers.

Degree Requirements

The M.S.W. degree program requires completion of 88-89 quarter units, distributed among core courses, concentration courses, elective courses, and the integrative seminar or graduate thesis. Of these, at least 75-77 units must be completed in residence after being admitted to the program (transfer units are limited to 13 quarter units). No course numbered 1000 to 2999 (or equivalent if taken elsewhere) may be used as part of the 88-89 unit graduate degree program.

A grade point average of 3.0 must be maintained in the courses taken to satisfy the degree requirements. All graduate degree requirements must be completed within the five (5) years prior to graduation.

Curricular Requirements

A. Core Requirements (44 units)

Prerequisite courses (STAT 1000 or equivalent, human biology or anatomy and physiology) must be completed before taking the required courses.

- SW 6000 - Human Behavior and Social Environment I *Units: 4*
- SW 6001 - Human Behavior and Social Environment II *Units: 4*
- SW 6010 - Race, Gender and Inequality in Social Work Practice *Units: 4*
- SW 6011 - Generalist Practice I *Units: 4*
- SW 6012 - Generalist Practice II *Units: 4*
- SW 6013 - Generalist Practice III *Units: 4*
- SW 6020 - Field Instruction I *Units: 4*
- SW 6021 - Field Instruction II *Units: 4*
- SW 6022 - Field Instruction III *Units: 4*
- SW 6030 - Social Welfare Policy : History and Philosophy *Units: 4*
- SW 6032 - Social Welfare Policy: Research *Units: 4*

B. Concentrations (29-34 units)

Select one of the following concentrations:

1. Children, Youth, and Families

- SW 6400 - Title IV-E Seminar *Units: 1*
- SW 6500 - Advanced Micro Practice: Children, Youth, and Families *Units: 4*
- SW 6510 - Advanced Mezzo Practice: Children, Youth, and Families *Units: 4*
- SW 6520 - Advanced Policy Practice: Children, Youth, and Families *Units: 4*
- SW 6530 - Field Instruction IV *Units: 4*
- SW 6531 - Field Instruction V *Units: 4*

- SW 6532 - Field Instruction VI *Units: 4*
- SW 6932 - Qualitative and Qualitative Analysis *Units: 4*
- SW 6935 - Program Evaluation *Units: 4* (Students choosing to complete their Capstone Experience with 8 units of SW 6910 - University Thesis, are not required to complete this course.)

2. Community Mental Health

- SW 6405 - Community Mental Health Seminar *Units: 1*
- SW 6505 - Advanced Micro Practice: Community Mental Health *Units: 4*
- SW 6515 - Advanced Mezzo Practice: Community Mental Health *Units: 4*
- SW 6525 - Advanced Policy Practice: Community Mental Health *Units: 4*
- SW 6530 - Field Instruction IV *Units: 4*
- SW 6531 - Field Instruction V *Units: 4*
- SW 6532 - Field Instruction VI *Units: 4*
- SW 6932 - Qualitative and Qualitative Analysis *Units: 4*
- SW 6935 - Program Evaluation *Units: 4* (Students choosing to complete their Capstone Experience with 8 units of SW 6910 - University Thesis, are not required to complete this course.)

Footnote:

1. These are seminars required for specific grant programs (Title IV-E and CalSWEC II). Students in these programs will take one extra unit, bringing their total to 89 units.

C. Electives (8 units)

Select 8 units from the following courses:

- EPSY 6029 - Seminar in Chemical Dependency *Units: 2*
- EPSY 6403 - Psychotherapy for Children *Units: 4*
- EPSY 6406 - Seminar in Human Sexuality *Units: 2*
- EPSY 6500 - Cognitive Behavior Therapy *Units: 4*
- EPSY 6784 - Pharmacology and Counseling *Units: 3*
- SW 6550 - Social Work Psychosocial Rehabilitation *Units: 4*
- SW 6552 - Legal Issues in Social Work Practice *Units: 4*
- SW 6553 - Assessment and Treatment of Substance Abuse *Units: 4*
- SW 6554 - Occupational Social Work *Units: 4*
- SW 6555 - School Social Work *Units: 4*
- SW 6556 - Human Sexuality and Social Work *Units: 4*
- SW 6558 - Supervision and Staff Development *Units: 4*
- SW 6559 - Youth and the Justice System *Units: 4*
- SW 6560 - Family Violence Across the Lifespan *Units: 4*
- SW 6561 - Advanced Psychosocial Assessment and Diagnosis *Units: 4*
- SW 6962 - Writing for Social Work *Units: 2*
- SW 6964 - Practice with Lesbian, Bi-Sexual, Gay, Transgendered and Questioning Populations *Units: 4*
- SW 6965 - Practice with Latino Populations *Units: 4*
- SW 6966 - Social Work and Public Mental Health Across the Lifespan *Units: 4*

D. Capstone Experience (4 units)

Choose one of the following;

- SW 6909 - Departmental Thesis *Units: 4*
- SW 6910 - University Thesis *Units: 4*
- SW 6959 - Integrative Seminar *Units: 4*

Credit by Examination

If you have special expertise that is covered in a required course, you may ask to receive credit for the course through examination. To receive credit in the course, you must pass the examination with a grade of "B-" or better. Please note that units taken credit-by-examination are considered non-resident units and only a maximum of 13 non-resident units are allowed in a graduate degree. Other examples of non-resident units are those earned while at other schools, while an undergraduate with permission to take graduate courses, while pursuing an additional baccalaureate degree in "Unclassified Post-baccalaureate" status, while enrolled in another graduate degree program, or while enrolled in Extension courses (including Open University courses).

Students with M.S.W.-level coursework in other CSWE-accredited programs are advised to contact the Social Work Department Chair concerning the possibility of transfer of credit.

Incompletes

If you accumulate more than 8 units of work graded "I" (Incomplete Authorized), you may not register for courses applicable to the degree until the coursework is completed and the "I" grades are changed to passing grades.

Capstone Experience

Students have three choices for completing a capstone experience in the MSW program. The first is the Departmental Thesis, SW 6909. Students may either sign up individually with a faculty advisor or meet with their advisor in a scheduled graduate course. A faculty member serves as director of the departmental thesis. An oral defense is required. Two copies of the departmental thesis are required for the department.

The second choice is a University Thesis, SW 6910. This choice is supervised by a faculty committee, follows a university specified format, and includes a required oral defense. Students following this choice are not required to complete the Program Evaluation course (SW 6956) within their concentration. This course must be repeated once for a total credit of 8 units.

The third and final choice is the Integrative Seminar, SW 6959. This integrative seminar provides students with the opportunity to demonstrate mastery of the core objectives of the MSW program. Students, in cooperation with faculty and agency supervisors, complete an agency-focused project or research on a topic focused on social work practice and advocacy.

A grade of "RP" (Report in Progress) may be given for a thesis that is not completed at the end of the quarter. The "RP" grade must be changed to a passing grade within five (5) years of your initial enrollment in a thesis course or it will become an "F."

Granting the Degree

Upon satisfactory completion of all requirements for the degree, the department will recommend that eligible students be granted the Master of Social Work degree. You must file for graduation with the Department of Social Work by the end of the second week of the quarter prior to the quarter in which you expect to graduate.

Sociology, M.A.

Important Notice:

At this time, the Department is not accepting applications for the M.A. in Sociology. Please consult the Department for any changes.

Program Description

The Department of Sociology and Social Services offers graduate study leading to the degree of Master of Arts in Sociology with a capstone examination. The candidate is responsible for the fulfillment of the general requirements stated in this catalog as well as the specific requirements of the department stated below.

Student Learning Outcomes

Students graduating with an M.A. in Sociology will be able to:

- write an original sociological analysis;
- understand the role of theory in sociology and how to apply key concepts in social analysis;
- employ quantitative and qualitative research methods in sociology.

Admission ("Classified Standing")

The student should note that admission to the university as a post-baccalaureate student does not in itself constitute admission to the department's program. In general, the program is open to graduates of accredited institutions who have:

- completed coursework equivalent to that required in the lower and upper division core in Sociology at Cal State East Bay,
- achieved not less than a 3.0 grade point average in all graduate and undergraduate work,
- submitted to the department letters of reference from two former instructors who are familiar with the student's academic work, and
- submitted a writing sample to the department. For "Classified Graduate" status, the student must have fulfilled the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

In exceptional cases, a student who has earned less than a 3.0, but above a 2.5 grade point average, may be admitted to "Conditionally Classified Graduate" standing.

Maintenance of "Classified Graduate Standing"

To maintain "Classified Graduate" standing, a grade point average of at least 3.0 must be achieved in all courses taken in the approved program, whether taken at Cal State East Bay or at some other accredited institution. If a candidate's grade point average falls below 3.0, the candidate shall be placed on probation at the end of that quarter. If while on probation the candidate fails to make progress toward raising his or her grade point average toward a 3.0, the candidate is subject to disqualification at the discretion of appropriate Cal State East Bay authorities. Disqualified students will not normally be considered for readmission to Cal State East Bay for at least one year after disqualification.

Advancement to Candidacy

A student who holds "Classified Graduate" standing may be Advanced to Candidacy for the master's degree when the student has:

- Filed an approved program of study with the department;
- Completed at least 12 quarter units of approved graduate-level work beyond the baccalaureate degree with a grade point average of 3.0 or better;
- Been recommended for Advancement to Candidacy by the department.

Curricular Requirements (45 units)

Forty-five (45) quarter units of approved courses earned in graduate standing of which 32 quarter units must be completed in residence. With departmental approval, up to 12 quarter units of upper-division work required to remove undergraduate deficiencies can be counted toward the 45 quarter units required for the degree.

All Students must complete (A) and (B) and one of four options under (C). (Note: STAT 1000 is a prerequisite for STAT 3010.)

A. Core Requirements (20 units)

- SOC 6111 - Advanced Sociological Research Methods I *Units: 4*
- SOC 6112 - Advanced Sociological Research Methods II *Units: 4*
- SOC 6311 - Seminar in Sociological Theory I *Units: 4*
- SOC 6312 - Seminar in Sociological Theory II *Units: 4*
- STAT 3010 - Statistical Methods in the Social Sciences *Units: 4*

B. Topics Seminars in Sociology (12 units)

- SOC 6800 - Topics Seminar *Units: 4* (May be taken three times for credit)

C. Capstone Experiences (13 units)

Comprehensive Examination

- Electives chosen under advisement from upper-division courses and graduate seminars in Sociology, Statistics, Foreign Languages and/or closely-related fields (13)
- Area Comprehensive Examination (in three areas)
- Theory
- Methods
- Capstone paper (topic area elected in collaboration with supervising professor)

Before a student may take the Comprehensive Examination, (s)he must be Advanced to Candidacy. Failure to pass the examination twice results in dismissal from the program.

Upper Division Courses Acceptable for the Master's Degree

All sociology courses in the 3000-4000 series are acceptable choices in the master's program.

Special Education, Mild-Moderate Disabilities Option, M.S.

Special Education Programs of Study

Faculty: Jacki L. Anderson (Coordinator, Moderate-Severe Disabilities), Ann T. Halvorsen, Linda Smetana (Coordinator, Mild-Moderate Disabilities)

The Special Education program prepares their graduates for careers in direct teaching and for leadership roles in Special Education. Programs are offered which lead to the Master of Science degree and/or to the Education Specialist: Mild-Moderate and Moderate-Severe Disabilities Credentials.

The emphasis is on providing students with a wide range of practical methods for enhancing the lives of individuals with exceptional needs. To this end, coursework is taught by successful practitioners in the field. Also, the programs provide extensive supervised fieldwork in settings that are appropriate to each student's professional goals.

Additional Program Requirement:

To earn the Preliminary Education Specialist Credential in Mild-Moderate Disabilities all candidates must:

- (1) hold a valid Multiple Subject or Single Subject Teaching Credential, or
- (2) be enrolled in the joint Multiple Subject/Education Specialist (TED/SPED) program.

M.S. in Special Education

The M.S. in Special Education may be obtained in one of two paths, either:

- (a) in conjunction with the Special Education credentials, or
- (b) through a combination of the Special Education credential and research coursework listed below.

Candidates who want to pursue only the master's degree without Specialist teaching credentials will follow the program outlines below. These candidates may obtain an M.S. degree in Special Education with an Option in either Mild-Moderate or Moderate-Severe Disabilities.

The master's degree requirements include both coursework and fieldwork, as well as research and advanced study, including completion of a culminating Department (Mild-Moderate Disabilities Option) or University (Moderate- Severe Disabilities Option) thesis.

Applicants will apply for admission to the Department of Educational Psychology: Special Education, and will follow the departmental as well as the university application procedures.

The number of units required for the degree is 46-50 units.

Prerequisite Course

Units not included in degree totals.

- EPSY 5021 - Introduction to Educating all Students in Diverse Classrooms *Units: 4*

Core Electives (8 units)

Choose two of the following:

- EPSY 6124 - Augmentative Communication and Assistive Technology *Units: 4*
- EPSY 6130 - Service Learning and Positive School Climate *Units: 4*
- EPSY 6141 - Social Networks and Communication for Students with Autism Spectrum Disorders (ASD) and Other Disabilities *Units: 4*
- EPSY 6145 - Advanced Studies in Adolescent Learning and Secondary Curriculum *Units: 4*

Mild-Moderate Disabilities Option (42 units)

- EPSY 6023 - Research in Applied Behavioral Sciences *Units: 4*
- EPSY 6127 - Instruction and Behavioral Support: Mild-Moderate Disabilities *Units: 4*
- EPSY 6129 - Advanced Study in Collaborative Service Delivery, Education, and Transition *Units: 4*
- EPSY 6131 - Assessments: Students with Mild-Moderate Disabilities *Units: 4*
- EPSY 6133 - Curriculum: Students with Mild-Moderate Disabilities *Units: 4*
- EPSY 6134 - Advanced Curriculum and Instruction: Mild-Moderate Disabilities *Units: 4*
- EPSY 6143 - Positive Behavior Supports *Units: 4*
- EPSY 6206 - Advanced Studies in the Education of Students with Mild-Moderate Disabilities: Research and Professional Practice *Units: 4*
- EPSY 6860 - Advanced Fieldwork I *Units: 2-4 (students in this program are required to take as a 4-units course)*
- EPSY 6862 - Advanced Fieldwork II *(students in this program are required to take as a 4-units course).*

Mild-Moderate Capstone

(students in this option are required to take this course twice for a total of 6 units)

- EPSY 6021 - Thesis-Project Seminar (Mild-Moderate Disabilities Option) *Units: 3*

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Special Education, Moderate-Severe Disabilities Option, M.S.

Special Education Programs of Study

Faculty: Jacki L. Anderson (Coordinator, Moderate-Severe Disabilities), Ann T. Halvorsen, Linda Smetana (Coordinator, Mild-Moderate Disabilities)

The Special Education program prepares their graduates for careers in direct teaching and for leadership roles in Special Education. Programs are offered which lead to the Master of Science degree and/or to the Education Specialist: Mild-Moderate and Moderate-Severe Disabilities Credentials.

The emphasis is on providing students with a wide range of practical methods for enhancing the lives of individuals with exceptional needs. To this end, coursework is taught by successful practitioners in the field. Also, the programs provide extensive supervised fieldwork in settings that are appropriate to each student's professional goals.

Additional Program Requirement:

To earn the Preliminary Education Specialist Credential in Mild-Moderate Disabilities all candidates must:

- (1) hold a valid Multiple Subject or Single Subject Teaching Credential, or
- (2) be enrolled in the joint Multiple Subject/Education Specialist (TED/SPED) program.

M.S. in Special Education

The M.S. in Special Education may be obtained in one of two paths, either:

- (a) in conjunction with the Special Education credentials, or
- (b) through a combination of the Special Education credential and research coursework listed below.

Candidates who want to pursue only the master's degree without Specialist teaching credentials will follow the program outlines below. These candidates may obtain an M.S. degree in Special Education with an Option in either Mild-Moderate or Moderate-Severe Disabilities.

The master's degree requirements include both coursework and fieldwork, as well as research and advanced study, including completion of a culminating Department (Mild-Moderate Disabilities Option) or University (Moderate- Severe Disabilities Option) thesis.

Applicants will apply for admission to the Department of Educational Psychology: Special Education, and will follow the departmental as well as the university application procedures.

The number of units required for the degree is 46-50 units.

Prerequisite Course

Units not included in degree totals.

- EPSY 5021 - Introduction to Educating all Students in Diverse Classrooms *Units: 4*

Core Electives (8 units)

Choose two of the following:

- EPSY 6124 - Augmentative Communication and Assistive Technology *Units: 4*
- EPSY 6130 - Service Learning and Positive School Climate *Units: 4*
- EPSY 6141 - Social Networks and Communication for Students with Autism Spectrum Disorders (ASD) and Other Disabilities *Units: 4*
- EPSY 6145 - Advanced Studies in Adolescent Learning and Secondary Curriculum *Units: 4*

Moderate-Severe Disabilities Option (38 units)

- EPSY 6023 - Research in Applied Behavioral Sciences *Units: 4*
- EPSY 6129 - Advanced Study in Collaborative Service Delivery, Education, and Transition *Units: 4*

- EPSY 6137 - Instructional and Behavioral Support: Moderate-Severe Disabilities *Units: 4*
- EPSY 6140 - Curriculum: Students with Moderate-Severe Disabilities *Units: 4*
- EPSY 6142 - Assessment: Students with Moderate-Severe Disabilities *Units: 4*
- EPSY 6143 - Positive Behavior Supports *Units: 4*
- EPSY 6207 - Advanced Studies in the Education of Students with Moderate to Severe Disabilities: Research and Professional Practice *Units: 4*
- EPSY 6860 - Advanced Fieldwork I *Units: 2-4 (students in this program are required to take as a 4-unit course)*

Moderate-Severe Capstone

(students in this option are required to take this course for 6 units)

- EPSY 6910 - University Thesis *Units: 1-9*

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Speech-Language Pathology, M.S.

Program Description

The Master of Science degree in Speech-Language Pathology is offered in the Department of Communicative Sciences and Disorders. The objective of this program is the professional preparation of each student, academically and clinically, for state licensure, clinical certification by the American Speech-Language-Hearing Association, and the credential as a public school Speech, Language and Hearing Specialist.

Speech-language pathology and audiology are the professions which help adults and children overcome disabilities of speech, language and hearing.

This program has developed a reputation for rigorous and balanced professional training. The master's degree program is accredited by the American Speech-Language-Hearing Association.

Student Learning Outcomes

Students graduating with an M.S. in Speech-Language Pathology will be able to:

- Screen, assess and treat individuals with a variety of communicative disorders across the lifespan;
- Communicate and collaborate effectively with clients, families, and other professionals;
- Evaluate and apply clinical research, recognizing the need for evidence to support best practices in clinical service delivery;
- Consistently apply ethical professional standards, recognize and respect the limits of their professional preparation and clinical skills, and work effectively with other professionals;
- Demonstrate cultural competence and commitment to advocacy for persons with communicative disorders.

Career Opportunities

Students who complete the Master of Science degree in Speech-Language Pathology are eligible for ASHA certification, California state licensure, and in most cases the Speech-Language Pathology Services Credential. Speech-language pathologists work in a variety of settings including hospitals, schools, rehabilitation centers, community speech and hearing clinics, public schools, and private practice.

Faculty

The Communicative Sciences and Disorders is comprised of five full-time professors and two clinical staff. Each of these professional faculty and staff has clinical and/or research interests that encompass the full range of communicative disorders. Regular guest lecturers supplement the academic offerings. Faculty, professional staff, and part-time supervisors who are active in the community provide clinical supervision.

Special Features

Clinical experiences are a key component in preparing students for licensure. The department operates the Speech, Language and Hearing Clinic, an on-campus facility that provides clinical services to speech, language, and hearing impaired individuals from Bay Area communities. Students who are enrolled in the Speech-Language Pathology master's program are able to observe, receive training, and do research in this fully-equipped facility. Additional clinical training is received in off-site placements and internships in settings that meet each student's interests and training requirements including hospitals, rehabilitation facilities, schools, and clinics. In order to acquire the knowledge and skills requisite to the practice of speech-language pathology, including the ability to function in a broad variety of clinical situations and to render a wide spectrum of client care, students must demonstrate skills and attributes in five skill areas: academic performance, written language, oral communication, hearing, and interpersonal management. Prior to entering clinic, students will pass an essential functions evaluation of skills necessary to be an effective clinician. The evaluation will include a screening of students' speech, oral-written language, and hearing.

Scholarships

• The most usual form of financial aid is in the form of guaranteed student loans. However, other types of financial aid are available. The university supports the following programs:

- State University Grant
- Federal Perkins Loan
- Federal Stafford Loan (including unsubsidized)
- Federal Work-Study
- Federal Supplemental Loans for Students
- Cal State East Bay Scholarships

• The Department of Communicative Sciences and Disorders recommends the award of certain forms of financial aid within the University.

They include the following:

- *Betty Lindeman and Robert N. Rosenthal Memorial Fund*, non-interest loans, \$500 - \$1500 for graduate students in Communicative Sciences and Disorders.
- *Excellence in Aphasia Group Treatment Award*, \$3500 scholarship for a graduate student in Communicative Sciences and Disorders
- *Stephanie Amore Memorial Fund*, endowment earnings benefit students in the department
- *Stephanie Kalman Foundation Scholarships*, \$2,000-\$3000 scholarships for undergraduate and graduate students in Communicative Sciences and Disorders
- The department also maintains information on scholarships and grants from additional university and professional sources.
- Occasionally, funds are available for Graduate Equity Fellowships, Research and Teaching Assistantships, and Student Assistantships (clerical).

Admission

A candidate must be admitted to the university, consistent with requirements and procedures explained in this catalog. Interested candidates apply for admission to the department and to the university at the same time. Applications for admission to the department are online at the department website (<http://www.csueastbay.edu/commsci>).

There are three categories of student status while pursuing the degree: "Conditionally Classified Graduate", "Classified Graduate", and "Advancement to Candidacy."

"Conditionally Classified" Status

Students are in "Conditionally Classified" status when they have been admitted to the M.S. in Speech-Language Pathology degree program, but have not yet completed the requirements for "Classified Graduate" status. Students whose undergraduate degree is not in the field of speech pathology should apply under this status.

"Classified Graduate" Status

Students are in "Classified Graduate" status when they:

- have been admitted to the M.S. in Speech-Language Pathology degree program;
- possess a baccalaureate degree from an accredited college or university with a major in Speech Pathology and Audiology or the equivalent coursework in Speech Pathology and Audiology with another degree. Preparatory coursework completed at other institutions must correspond in scope and content with required and elective courses offered on this campus;
- complete SPPA 4852, SPPA 4854, SPPA 4859, SPPA 4861, SPPA 4862, SPPA 4865, SPPA 4866 and SPPA 4867 or the equivalent;
- possess an overall grade point average of 3.0 or better covering the last 90 quarter units of course work;
- present evidence of having satisfactorily completed a minimum of 60 clock hours of supervised clinical practica in speech, language, and hearing;
- fulfill the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Advancement to Candidacy

Students reach "Advancement to Candidacy" status if they:

- are a "Classified Graduate" student in good standing;
- complete at least 12 units in graduate work in Speech Pathology and Audiology with a GPA of at least 3.0;
- complete a minimum of 2 units of SPPA 6056 and/or SPPA 6156 with a grade of "B" or better;
- defend satisfactorily his or her thesis proposal, if a thesis capstone is selected; and
- show evidence of progress and ability to complete the program by receiving at least a 3.0 GPA in each course taken.

Speech-Language Pathology, M.S.

Program Description

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facility. Additional clinical training is received in off-site placements and internships in settings that meet each student's interests and training requirements including hospitals, rehabilitation facilities, schools, and clinics. In order to acquire the knowledge and skills requisite to the practice of speech-language pathology, including the ability to function in a broad variety of clinical situations and to render a wide spectrum of client care, students must demonstrate skills and attributes in five skill areas: academic performance, written language, oral communication, hearing, and interpersonal management. Prior to entering clinic, students will pass an essential functions evaluation of skills necessary to be an effective clinician. The evaluation will include a screening of students' speech, oral-written language, and hearing.

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There are three categories of student status while pursuing the degree: "Conditionally Classified Graduate", "Classified Graduate", and "Advancement to Candidacy."

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- possess a baccalaureate degree from an accredited college or university with a major in Speech Pathology and Audiology or the equivalent coursework in Speech Pathology and Audiology with another degree. Preparatory coursework completed at other institutions must correspond in scope and content with required and elective courses offered on this campus;
- complete SPPA 4852, 4854, 4859, 4861, 4862, 4865, 4866 and 4867 or the equivalent;
- possess an overall grade point average of 3.0 or better covering the last 90 quarter units of course work;
- present evidence of having satisfactorily completed a minimum of 60 clock hours of supervised clinical practica in speech, language, and hearing;
- fulfill the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Advancement to Candidacy

Students reach "Advancement to Candidacy" status if they:

- are a "Classified Graduate" student in good standing;
- complete at least 12 units in graduate work in Speech Pathology and Audiology with a GPA of at least 3.0;
- complete a minimum of 2 units of SPPA 6056 and/or SPPA 6156 with a grade of "B" or better;
- defend satisfactorily his or her thesis proposal, if a thesis capstone is selected; and
- show evidence of progress and ability to complete the program by receiving at least a 3.0 GPA in each course taken.

Degree Requirements (74-78 units)

The program leading to the **M.S. degree in Speech-Language Pathology** requires completion of at least **74 quarter units** of credit with grades of "B" (3.0) or better from the courses listed below.

The **Speech-Language Pathology Services Credential** track requires the completion of the MS degree plus additional units and requirements for **78 quarter units** (see "Credentials" listed in the Programs of Study chapter in the catalog).

The work must be completed within five calendar years after admission to the program. At least 63 units must be completed in residence.

Core Required Courses (68 units)

- SPPA 6000 - Research Methods in Communicative Sciences and Disorders *Units: 4*
- SPPA 6010 - Advanced Speech and Hearing Science *Units: 2*
- SPPA 6020 - Vocal Pathology and Rehabilitation *Units: 4*
- SPPA 6030 - Clinical Organization and Management *Units: 2*
- SPPA 6040 - Advanced Seminar in Speech, Language and Communication Disorders *Units: 2*
- SPPA 6050 - Neurogenic Motor Speech Disorders: Adults and Children *Units: 4*
- SPPA 6055 - Aphasia and Related Neurogenic Language Disorders *Units: 4*
- SPPA 6056 - Practicum in Speech-Language Pathology: Treatment *Units: 2*
- SPPA 6057 - Practicum in Speech-Language Pathology: Assessment *Units: 2*
- SPPA 6060 - Advanced Study of Language Disorders in Children *Units: 4*
- SPPA 6064 - Fluency Disorders *Units: 4*
- SPPA 6066 - Clinical Internship in Speech-Language Pathology *Units: 6*
- SPPA 6070 - Augmentative/Alternative Communication-Assistive Technology for Speech-Language Pathologists *Units: 4*
- SPPA 6080 - Counseling Individuals with Speech, Language and Hearing Disorders *Units: 4*
- SPPA 6156 - Practicum in Audiologic Assessment *Units: 2*
- SPPA 6160 - Audiological Rehabilitation *Units: 4*
- SPPA 6220 - Dysphagia in Adults and Children *Units: 4*

Core Electives (4-6 units)

Students completing a 2-unit University Thesis for their Capstone Experience need only take a minimum of 4 elective units.

Students must select a minimum of 4-6 units from the following list of approved SPPA elective courses. Course substitutions may be made only with the approval of a graduate faculty advisor. Students may need to enroll in more than 4 or 6 units of electives to prepare for professional certification, licensure or credential.

- SPPA 6224 - Issues in Ethics *Units: 2*
- SPPA 6228 - School-based Issues in Speech-Language Pathology *Units: 2*
- SPPA 6229 - Medical Speech-Language Pathology *Units: 2*

Core Capstone Experiences (0-2 units)

Satisfactory achievement on a written or oral comprehensive examination, the format of which will be determined by the department (0-units), **OR** SPPA 6910 University Thesis *Units: 2*, including an oral examination.

The student need not have taken all required and elective courses for the major prior to completing the capstone experience; however, information contained in those courses may be included in the capstone experience.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Statistics, Actuarial Science Option, M.S.

Program Description

The Department of Statistics and Biostatistics offers graduate study leading to the degree Master of Science in Statistics. The program is flexible in order to serve the needs of students with varying backgrounds (including statistics, mathematics, computer science, engineering, business, economics and other quantitative fields) and with different career objectives. The program includes options in Applied Statistics, Computational Statistics, Mathematical Statistics, and Actuarial Science. All students are expected to master a wide variety of applied statistical, computational, and probabilistic techniques and the theoretical foundations upon which these techniques are based. Students are expected to be familiar with recent developments in the field and to be able to use the statistical literature to learn new techniques and theories throughout their professional careers. In addition to the general requirements stated elsewhere in this catalog, students must satisfy the departmental requirements stated in the following paragraphs.

Students interested in pursuing an M.S. degree in Biostatistics should see the Biostatistics chapter in the university catalog.

Student Learning Outcomes

Students graduating with an M.S. in Statistics from Cal State East Bay will be able to:

- Apply statistical methodologies, including a) descriptive statistics and graphical displays, b) probability models for uncertainty, stochastic processes, and distribution theory, c) hypothesis testing and confidence intervals, d) ANOVA and regression models (including linear, and multiple linear) and analysis of residuals from models and trends.
- Derive and understand basic theory underlying these methodologies
- Formulate and model practical problems for solutions using these methodologies
- Produce relevant computer output using standard statistical software and interpret the results appropriately
- Communicate statistical concepts and analytical results clearly and appropriately to others; and
- Understand theory, concepts, and terminology at a level that supports lifelong learning of related methodologies.

Admission Requirements

- A baccalaureate degree or equivalent.
- Differential and Integral Calculus, including multiple integration and infinite series (MATH 1304, MATH 1305, MATH 2304).
- Departmental approval.
- For "Classified Graduate" status, fulfillment of the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

In addition to the above minimal requirements for admission, if students have some of the following background they will be at an advantage both as to selection for admission to the program and optimal progress toward the degree if admitted:

- basic statistics and probability at the level of STAT 3401, STAT 3502 (or beyond)
- additional mathematics at the level of MATH 2101 (or beyond)
- knowledge of a computer programming language
- experience in a setting where studies or experiments are conducted for the collection of data.

Advancement to Candidacy Requirements

- Completion of at least 15 quarter units of approved coursework beyond the baccalaureate, with an average of "B" (3.0) or higher.

- Departmental approval.

Degree Requirements (48 units)

Successful completion of the following unit, grade, and course requirements.

Unit and Grade Requirements

The M.S. in Statistics program consists of at least 48 quarter units of approved upper division and graduate work. The university requirement for the minimum number of 6000-level units applies. All work applied toward the 48 units must be at an average grade of "B" (3.0) or higher. No graduate-level required course may be at a grade below "B-."

Course Requirements (28 units)

Required Graduate Level Courses (28 units)

- STAT 6204 - Probability Theory *Units: 4*
- STAT 6205 - Statistical Theory *Units: 4*
- STAT 6304 - Advanced Statistical Inference *Units: 4*
- STAT 6305 - Analysis of Variance Models *Units: 4*
- STAT 6501 - Mathematical Statistics I *Units: 4*
- STAT 6502 - Mathematical Statistics II *Units: 4*
- STAT 6509 - Theory and Application of Regression *Units: 4*

Actuarial Science Option (20 units)

Graduate coursework in the College of Business and Economics relevant to insurance, finance, and operations research is recommended. Areas of interest include stochastic modeling, force of mortality, life tables, and other topics from actuarial mathematics.

Required Courses:

Choose one course from:

- STAT 6310 - Advanced Stochastic Processes and Simulation *Units: 4*
- STAT 6401 - Advanced Probability I *Units: 4*
- One course from STAT 6851 - STAT 6859 Selected Topics in Actuarial and Decision Science *Units: 4*
- One approved 6000-level course from the College of Business and Economics *Units: 4*
- One additional approved 6000-level course from statistics *Units: 4*

Comprehensive Examination

Successful completion of a departmental examination is required. This written examination will cover the contents of the courses in the candidate's approved program. Other material may be included, the general nature of which will be specified in advance. The examination is given only in the Fall and Spring quarters, and will cover both applied and theoretical topics.

In each quarter of offering, the department Chair will appoint three or more members of the graduate faculty to administer the examination. Each student will generally take the Comprehensive Examination in the quarter of intended graduation or in the preceding quarter, after consulting with the graduate advisor. Students enrolled in the Actuarial Science Option may substitute a passing grade on an approved national actuarial exam for a designated portion of the comprehensive examination, with the approval of the graduate advisor. The examination committee is the final departmental authority in deciding eligibility to take the examination.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills requirement.

Statistics, Applied Statistics Option, M.S.

Program Description

The Department of Statistics and Biostatistics offers graduate study leading to the degree Master of Science in Statistics. The program is flexible in order to serve the needs of students with varying backgrounds (including statistics, mathematics, computer science, engineering, business, economics and other quantitative fields) and with different career objectives. The program includes options in Applied Statistics, Computational Statistics, Mathematical Statistics, and Actuarial Science. All students are expected to master a wide variety of applied statistical, computational, and probabilistic techniques and the theoretical foundations upon which these techniques are based. Students are expected to be familiar with recent developments in the field and to be able to use the statistical literature to learn new techniques and theories throughout their professional careers. In addition to the general requirements stated elsewhere in this catalog, students must satisfy the departmental requirements stated in the following paragraphs.

Students interested in pursuing an M.S. degree in Biostatistics should see the Biostatistics chapter in the university catalog.

Student Learning Outcomes

Students graduating with an M.S. in Statistics from Cal State East Bay will be able to:

- Apply statistical methodologies, including a) descriptive statistics and graphical displays, b) probability models for uncertainty, stochastic processes, and distribution theory, c) hypothesis testing and confidence intervals, d) ANOVA and regression models (including linear, and multiple linear) and analysis of residuals from models and trends.
- Derive and understand basic theory underlying these methodologies
- Formulate and model practical problems for solutions using these methodologies
- Produce relevant computer output using standard statistical software and interpret the results appropriately
- Communicate statistical concepts and analytical results clearly and appropriately to others; and
- Understand theory, concepts, and terminology at a level that supports lifelong learning of related methodologies.

Admission Requirements

- A baccalaureate degree or equivalent.
- Differential and Integral Calculus, including multiple integration and infinite series (MATH 1304, MATH 1305, MATH 2304).
- Departmental approval.
- For "Classified Graduate" status, fulfillment of the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

In addition to the above minimal requirements for admission, if students have some of the following background they will be at an advantage both as to selection for admission to the program and optimal progress toward the degree if admitted:

- basic statistics and probability at the level of STAT 3401, STAT 3502 (or beyond)
- additional mathematics at the level of MATH 2101 (or beyond)
- knowledge of a computer programming language
- experience in a setting where studies or experiments are conducted for the collection of data.

Advancement to Candidacy Requirements

- Completion of at least 15 quarter units of approved coursework beyond the baccalaureate, with an average of "B" (3.0) or higher.
- Departmental approval.

Degree Requirements (48 units)

Successful completion of the following unit, grade, and course requirements.

Unit and Grade Requirements

The M.S. in Statistics program consists of at least 48 quarter units of approved upper division and graduate work. The university requirement for the minimum number of 6000-level units applies. All work applied toward the 48 units must be at an average grade of "B" (3.0) or higher. No graduate-level required course may be at a grade below "B-."

Course Requirements (28 units)

Required Graduate Level Courses (28 units)

- STAT 6204 - Probability Theory *Units: 4*
- STAT 6205 - Statistical Theory *Units: 4*
- STAT 6304 - Advanced Statistical Inference *Units: 4*
- STAT 6305 - Analysis of Variance Models *Units: 4*
- STAT 6501 - Mathematical Statistics I *Units: 4*
- STAT 6502 - Mathematical Statistics II *Units: 4*
- STAT 6509 - Theory and Application of Regression *Units: 4*

Applied Statistics Option (20 units)

Topics include a broad background in the practice of statistics, including data modeling and the use of computing packages for data analysis.

Required Courses:

Choose at least one course from:

- STAT 6250 - SAS Programming *Units: 4*
- STAT 6260 - R Programming *Units: 4*
- Additional three to four graduate electives in statistics or biostatistics, approved by a graduate advisor. *Units: 12-16*

Comprehensive Examination

Successful completion of a departmental examination is required. This written examination will cover the contents of the courses in the candidate's approved program. Other material may be included, the general nature of which will be specified in advance. The examination is given only in the Fall and Spring quarters, and will cover both applied and theoretical topics.

In each quarter of offering, the department Chair will appoint three or more members of the graduate faculty to administer the examination. Each student will generally take the Comprehensive Examination in the quarter of intended graduation or in the preceding quarter, after consulting with the graduate advisor. Students enrolled in the Actuarial Science Option may substitute a passing grade on an approved national actuarial exam for a designated portion of the comprehensive examination, with the approval of the graduate advisor. The examination committee is the final departmental authority in deciding eligibility to take the examination.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills requirement.

Statistics, Computational Statistics Option, M.S.

Program Description

The Department of Statistics and Biostatistics offers graduate study leading to the degree Master of Science in Statistics. The program is flexible in order to serve the needs of students with varying backgrounds (including statistics, mathematics, computer science, engineering, business, economics and other quantitative fields) and with different career objectives. The program includes options in Applied Statistics, Computational Statistics, Mathematical Statistics, and Actuarial Science. All students are expected to master a wide variety of applied statistical, computational, and probabilistic techniques and the theoretical foundations upon which these techniques are based. Students are expected to be familiar with recent developments in the field and to be able to use the statistical literature to learn new techniques and theories throughout their professional careers. In addition to the general requirements stated elsewhere in this catalog, students must satisfy the departmental requirements stated in the following paragraphs.

Students interested in pursuing an M.S. degree in Biostatistics should see the Biostatistics chapter in the university catalog.

Student Learning Outcomes

Students graduating with an M.S. in Statistics from Cal State East Bay will be able to:

- Apply statistical methodologies, including a) descriptive statistics and graphical displays, b) probability models for uncertainty, stochastic processes, and distribution theory, c) hypothesis testing and confidence intervals, d) ANOVA and regression models (including linear, and multiple linear) and analysis of residuals from models and trends.
- Derive and understand basic theory underlying these methodologies
- Formulate and model practical problems for solutions using these methodologies
- Produce relevant computer output using standard statistical software and interpret the results appropriately
- Communicate statistical concepts and analytical results clearly and appropriately to others; and
- Understand theory, concepts, and terminology at a level that supports lifelong learning of related methodologies.

Admission Requirements

- A baccalaureate degree or equivalent.
- Differential and Integral Calculus, including multiple integration and infinite series (MATH 1304, MATH 1305, MATH 2304).
- Departmental approval.
- For "Classified Graduate" status, fulfillment of the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

In addition to the above minimal requirements for admission, if students have some of the following background they will be at an advantage both as to selection for admission to the program and optimal progress toward the degree if admitted:

- basic statistics and probability at the level of STAT 3401, STAT 3502 (or beyond)
- additional mathematics at the level of MATH 2101 (or beyond)
- knowledge of a computer programming language
- experience in a setting where studies or experiments are conducted for the collection of data.

Advancement to Candidacy Requirements

- Completion of at least 15 quarter units of approved coursework beyond the baccalaureate, with an average of "B" (3.0) or higher.
- Departmental approval.

Degree Requirements (48 units)

Successful completion of the following unit, grade, and course requirements.

Unit and Grade Requirements

The M.S. in Statistics program consists of at least 48 quarter units of approved upper division and graduate work. The university requirement for the minimum number of 6000-level units applies. All work applied toward the 48 units must be at an average grade of "B" (3.0) or higher. No graduate-level required course may be at a grade below "B-."

Course Requirements (28 units)

Required Graduate Level Courses (28 units)

- STAT 6204 - Probability Theory *Units: 4*
- STAT 6205 - Statistical Theory *Units: 4*
- STAT 6304 - Advanced Statistical Inference *Units: 4*
- STAT 6305 - Analysis of Variance Models *Units: 4*
- STAT 6501 - Mathematical Statistics I *Units: 4*
- STAT 6502 - Mathematical Statistics II *Units: 4*
- STAT 6509 - Theory and Application of Regression *Units: 4*

Computational Statistics Option (20 Units)

Topics include regression modeling, multivariate statistics, factor analysis, Monte Carlo simulations, Markov Chain, Monte Carlo methods, bootstrapping, data mining, and other computationally intensive methods.

Required Courses:

Choose three courses from:

- STAT 6250 - SAS Programming *Units: 4*
- STAT 6260 - R Programming *Units: 4*
- STAT 6310 - Advanced Stochastic Processes and Simulation *Units: 4*
- STAT 6515 - Advanced Multivariate Analysis *Units: 4*
- STAT 6550 - Bayesian Statistics *Units: 4*
- STAT 6555 - Statistical Time Series Analysis *Units: 4*
- STAT 6601 - Advanced Statistical Computing *Units: 4*
- STAT 6610 - Data Visualization *Units: 4*
- STAT 6620 - Statistical Learning with R *Units: 4*

Choose two additional courses from those not taken above, or:

- One approved course from:
- STAT 6860 - Selected Topics in Graduate Probability and Statistics *Units: 4*
- STAT 6861 - Selected Topics in Graduate Probability and Statistics *Units: 4*
- STAT 6862 - Selected Topics in Graduate Probability and Statistics *Units: 4*
- STAT 6863 - Selected Topics in Graduate Probability and Statistics *Units: 4*
- STAT 6864 - Selected Topics in Graduate Probability and Statistics *Units: 4*

And:

- STAT 6865 - Mathematical Modeling *Units: 4*
- One approved upper-division or graduate level course in computer science *Units: 4* (graduate level preferred)

Comprehensive Examination

Successful completion of a departmental examination is required. This written examination will cover the contents of the courses in the candidate's approved program. Other material may be included, the general nature of which will be specified in advance. The examination is given only in the Fall and Spring quarters, and will cover both applied and theoretical topics.

In each quarter of offering, the department Chair will appoint three or more members of the graduate faculty to administer the examination. Each student will generally take the Comprehensive Examination in the quarter of intended graduation or in the preceding quarter, after consulting with the graduate advisor. Students enrolled in the Actuarial Science Option may substitute a passing grade on an approved national actuarial exam for a designated portion of the comprehensive examination, with the approval of the graduate advisor. The examination committee is the final departmental authority in deciding eligibility to take the examination.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills requirement.

Statistics, M.S.

Program Description

The Department of Statistics and Biostatistics offers graduate study leading to the degree Master of Science in Statistics. The program is flexible in order to serve the needs of students with varying backgrounds (including statistics, mathematics, computer science, engineering, business, economics and other quantitative fields) and with different career objectives. The program includes options in Applied Statistics, Computational Statistics, Mathematical Statistics, and Actuarial Science. All students are expected to master a wide variety of applied statistical, computational, and probabilistic techniques and the theoretical foundations upon which these techniques are based. Students are expected to be familiar with recent developments in the field and to be able to use the statistical literature to learn new techniques and theories throughout their professional careers. In addition to the general requirements stated elsewhere in this catalog, students must satisfy the departmental requirements stated in the following paragraphs.

Students interested in pursuing an M.S. degree in Biostatistics should see the Biostatistics chapter in the university catalog.

Student Learning Outcomes

Students graduating with an M.S. in Statistics from Cal State East Bay will be able to:

- Apply statistical methodologies, including a) descriptive statistics and graphical displays, b) probability models for uncertainty, stochastic processes, and distribution theory, c) hypothesis testing and confidence intervals, d) ANOVA and regression models (including linear, and multiple linear) and analysis of residuals from models and trends.
- Derive and understand basic theory underlying these methodologies
- Formulate and model practical problems for solutions using these methodologies
- Produce relevant computer output using standard statistical software and interpret the results appropriately
- Communicate statistical concepts and analytical results clearly and appropriately to others; and
- Understand theory, concepts, and terminology at a level that supports lifelong learning of related methodologies.

Admission Requirements

- A baccalaureate degree or equivalent.
- Differential and Integral Calculus, including multiple integration and infinite series (MATH 1304, MATH 1305, MATH 2304).
- Departmental approval.
- For "Classified Graduate" status, fulfillment of the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

In addition to the above minimal requirements for admission, if students have some of the following background they will be at an advantage both as to selection for admission to the program and optimal progress toward the degree if admitted:

- basic statistics and probability at the level of STAT 3401, STAT 3502 (or beyond)
- additional mathematics at the level of MATH 2101 (or beyond)
- knowledge of a computer programming language
- experience in a setting where studies or experiments are conducted for the collection of data.

Advancement to Candidacy Requirements

- Completion of at least 15 quarter units of approved coursework beyond the baccalaureate, with an average of "B" (3.0) or higher.
- Departmental approval.

Degree Requirements (48 units)

Successful completion of the following unit, grade, and course requirements.

Unit and Grade Requirements

The M.S. in Statistics program consists of at least 48 quarter units of approved upper division and graduate work. The university requirement for the minimum number of 6000-level units applies. All work applied toward the 48 units must be at an average grade of "B" (3.0) or higher. No graduate-level required course may be at a grade below "B-."

Course Requirements (28 units)

Required Graduate Level Courses (28 units)

- STAT 6204 - Probability Theory *Units: 4*
- STAT 6205 - Statistical Theory *Units: 4*
- STAT 6304 - Advanced Statistical Inference *Units: 4*
- STAT 6305 - Analysis of Variance Models *Units: 4*
- STAT 6501 - Mathematical Statistics I *Units: 4*
- STAT 6502 - Mathematical Statistics II *Units: 4*
- STAT 6509 - Theory and Application of Regression *Units: 4*

Electives (20 units)

Complete 20 units of advanced courses chosen with the advanced written approval of an advisor, or select an option listed under the Programs of Study chapter in the catalog.

Comprehensive Examination

Successful completion of a departmental examination is required. This written examination will cover the contents of the courses in the candidate's approved program. Other material may be included, the general nature of which will be specified in advance. The examination is given only in the Fall and Spring quarters, and will cover both applied and theoretical topics.

In each quarter of offering, the department Chair will appoint three or more members of the graduate faculty to administer the examination. Each student will generally take the Comprehensive Examination in the quarter of intended graduation or in the preceding quarter, after consulting with the graduate advisor. Students enrolled in the Actuarial Science Option may substitute a passing grade on an approved national actuarial exam for a designated portion of the comprehensive examination, with the approval of the graduate advisor. The examination committee is the final departmental authority in deciding eligibility to take the examination.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills requirement.

Statistics, Mathematical Statistics Option, M.S.

Program Description

The Department of Statistics and Biostatistics offers graduate study leading to the degree Master of Science in Statistics. The program is flexible in order to serve the needs of students with varying backgrounds (including statistics, mathematics, computer science, engineering, business, economics and other quantitative fields) and with different career objectives. The program includes options in Applied Statistics, Computational Statistics, Mathematical Statistics, and Actuarial Science. All students are expected to master a wide variety of applied statistical, computational,

and probabilistic techniques and the theoretical foundations upon which these techniques are based. Students are expected to be familiar with recent developments in the field and to be able to use the statistical literature to learn new techniques and theories throughout their professional careers. In addition to the general requirements stated elsewhere in this catalog, students must satisfy the departmental requirements stated in the following paragraphs.

Students interested in pursuing an M.S. degree in Biostatistics should see the Biostatistics chapter in the university catalog.

Student Learning Outcomes

Students graduating with an M.S. in Statistics from Cal State East Bay will be able to:

- Apply statistical methodologies, including a) descriptive statistics and graphical displays, b) probability models for uncertainty, stochastic processes, and distribution theory, c) hypothesis testing and confidence intervals, d) ANOVA and regression models (including linear, and multiple linear) and analysis of residuals from models and trends.
- Derive and understand basic theory underlying these methodologies
- Formulate and model practical problems for solutions using these methodologies
- Produce relevant computer output using standard statistical software and interpret the results appropriately
- Communicate statistical concepts and analytical results clearly and appropriately to others; and
- Understand theory, concepts, and terminology at a level that supports lifelong learning of related methodologies.

Admission Requirements

- A baccalaureate degree or equivalent.
- Differential and Integral Calculus, including multiple integration and infinite series (MATH 1304, MATH 1305, MATH 2304).
- Departmental approval.
- For "Classified Graduate" status, fulfillment of the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

In addition to the above minimal requirements for admission, if students have some of the following background they will be at an advantage both as to selection for admission to the program and optimal progress toward the degree if admitted:

- basic statistics and probability at the level of STAT 3401, STAT 3502 (or beyond)
- additional mathematics at the level of MATH 2101 (or beyond)
- knowledge of a computer programming language
- experience in a setting where studies or experiments are conducted for the collection of data.

Advancement to Candidacy Requirements

- Completion of at least 15 quarter units of approved coursework beyond the baccalaureate, with an average of "B" (3.0) or higher.
- Departmental approval.

Degree Requirements (48 units)

Successful completion of the following unit, grade, and course requirements.

Unit and Grade Requirements

The M.S. in Statistics program consists of at least 48 quarter units of approved upper division and graduate work. The university requirement for the minimum number of 6000-level units applies. All work applied toward the 48 units must be at an average grade of "B" (3.0) or higher. No graduate-level required course may be at a grade below "B-."

Course Requirements (28 units)

Required Graduate Level Courses (28 units)

- STAT 6204 - Probability Theory *Units: 4*
- STAT 6205 - Statistical Theory *Units: 4*
- STAT 6304 - Advanced Statistical Inference *Units: 4*
- STAT 6305 - Analysis of Variance Models *Units: 4*
- STAT 6501 - Mathematical Statistics I *Units: 4*
- STAT 6502 - Mathematical Statistics II *Units: 4*
- STAT 6509 - Theory and Application of Regression *Units: 4*

Mathematical Statistics Option (20 units)

Advanced coursework in mathematics is strongly recommended, particularly MATH 3100 - Linear Algebra and MATH 3300 - Analysis I (real analysis)

Required Courses:

- STAT 6310 - Advanced Stochastic Processes and Simulation *Units: 4*
- STAT 6401 - Advanced Probability I *Units: 4*
- Choose three additional approved upper-division or graduate level courses in mathematics or graduate level courses in statistics. Ordinarily, these would be at the 4000- or 6000-level. *Units: 12*

Comprehensive Examination

Successful completion of a departmental examination is required. This written examination will cover the contents of the courses in the candidate's approved program. Other material may be included, the general nature of which will be specified in advance. The examination is given only in the Fall and Spring quarters, and will cover both applied and theoretical topics.

In each quarter of offering, the department Chair will appoint three or more members of the graduate faculty to administer the examination. Each student will generally take the Comprehensive Examination in the quarter of intended graduation or in the preceding quarter, after consulting with the graduate advisor. Students enrolled in the Actuarial Science Option may substitute a passing grade on an approved national actuarial exam for a designated portion of the comprehensive examination, with the approval of the graduate advisor. The examination committee is the final departmental authority in deciding eligibility to take the examination.

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills requirement.

Doctoral

Educational Leadership for Social Justice, Ed.D.

Program Description

Recent legislation has authorized the California State University system to award the Doctor of Education (Ed. D.) degree in Educational Leadership. Offered by the Department of Educational Leadership, CSUEB began enrolling students in the Ed.D. program, Educational Leadership for Social Justice, summer 2008. Designed for educators who are employed in full-time positions, the program enrolls one cohort of educational leaders each year. Expected time to complete the degree, including writing the dissertation, is three calendar years, including summers.

The mission of the Doctoral Program, Educational Leadership for Social Justice (ELSJ), is to work with PK-12 educators and those in other agencies to prepare them to assume positions of leadership informed by a commitment to social justice. In particular, a primary objective of the ELSJ program is to prepare educators who will contribute to outcomes of educational equity by dismantling the academic opportunity gap between white students and populations of color. The program provides a blend of theory, research, and practice, in learning communities with faculty and other professionals and peers. Student develop a deeper understanding of themselves as educators, leaders, policy makers, and policy advocates as

they develop the knowledge, skills and habits of mind necessary to improve the quality of student learning by enacting bold, socially responsible leadership.

These educators further develop their abilities to engage members of city governments, school boards, businesses, political and parental communities in joint efforts to create policy and make strategic decisions designed to radically improve the life chances of all children. Leaders forge and sustain cultures of change through collaboration, advocacy, and institutional transformation.

The Ed.D. represents the highest level of formal preparation in the discipline of Educational Leadership. Recipients of the degree join a community of individuals who represent not only the attainment of distinction in preparation and practice but who will also serve as stewards of public education, as leaders who will contribute to a vision of education for the public good.

Student Learning Outcomes

The Ed.D. program, Educational Leadership for Social Justice, is organized around the following set of goals:

- Reflective Practice

To develop reflective leaders who can use self-analysis, inquiry and purposeful reflection to continually improve their own practice, model and encourage these habits with staff, and create communities of practice that promote high achievement for all students.

- Equity and Cultural Competency

To develop culturally competent practitioner-advocates who purposefully work for equity and to dismantle systems of cultural and racial domination/oppression.

- Systems Thinking

To develop skillful leaders who understand the dynamics of educational systems and who are able to leverage those systems in coherent, aligned strategies for educational change by creating democratic learning communities that promote high achievement for all students.

- Accountability for Equitable Student Performance

To develop instructional leaders who possess the knowledge and ability to ensure that all students are producing high quality work and achieving at optimum levels by fostering effective curricular programs, student-centered learning environments, and accountable school cultures that reflect high expectations for student outcomes.

- Instructional Leadership

To develop instructional leaders who inspire a shared vision and commitment to high student achievement informed by best practices by developing structures and processes fostering collaboration and inquiry for continuous instructional improvement.

- Leadership Capacity/Organizational Management

To develop leaders who assess, organize and allocate resources that build and sustain organizational culture, leadership, and change processes that move school systems toward meeting student achievement goals.

- Policy/Politics

To develop leaders who understand the dynamic nature of school systems and educational politics in order to influence politics and policies at multiple levels in ways that support goals of inclusion and equity for all constituents, especially underrepresented groups.

- Research

To develop leaders who are practitioner-researchers who purposefully engage in inquiry and construct knowledge that promotes equity in education and advances the public good.

Career Opportunities

Graduates with a doctoral degree in Educational Leadership serve in many different arenas that impact education. One career path for graduates is to become an executive leader in a school district or county office of education. Such positions include superintendents, assistant superintendents or directors of curriculum, programs or human relations. Other professionals obtaining the Ed.D. degree serve as policy makers in state and national departments of education, credentialing agencies or as staff for elected officials. A third group works with local, state or national educational foundations, school reform agencies, research organizations, or publishing companies. Many others direct grants or consult with schools or districts. Finally, people with Ed.D.s teach or serve in leadership roles in colleges and universities.

Faculty

Core faculty members for the Educational Leadership for Social Justice (ELSJ) Program are drawn from the Department of Educational Leadership and other Colleges from CSUEB. ELSJ core faculty members are active scholars who meet or exceed leadership and publication standards for their disciplines. This core faculty is deeply committed to improving pre-K to 12 education for the least served students. This commitment is deep, and includes participation in public discourse in the region and the State of California as well as formal research publications in national journals.

The core faculty strives for engaging research and theoretical work that leads directly to both, illuminating the issues schools face and designing initiatives for change. They have published in different journals covering a wide range of fields and study areas. In the field of education these journals include the following areas: teacher education, planning, leadership, administration, multicultural education, staff development, elementary, middle and high schooling, literacy, educational research, school reform, childhood, and adolescence. Additionally, core faculty scholarship extends to the fields of anthropology, sociology, psychiatry, religion, mathematics; and the area studies of women, race and ethnicity, gender, Latino studies, social justice, queer studies, and black studies.

Special Features

- Use of a cohort structure that will create and maintain a network of educators with shared goals and purposes; allow for individual interests and needs to enrich the dialogue among cohort members; establish conditions of safety for full exploration of ideas, including competing views; and establish and reinforce norms associated with doctoral level intellectual and professional work.
- Deliberate use of the Summer Quarter as a means for intense "front loading" of content, information, and skills essential to the work that will follow. The first summer will include an induction into doctoral habits of mind, including our focus on equity and reflective practice. In the second summer, students will synthesize survey courses from the first year of curriculum within the context of their own professional interests and begin to identify and explore possible dissertation topics. The third summer will focus on the development, review and approval of the dissertation proposal including clarification of research methodology, development of data instruments and preparation of Institutional Review Board (IRB) submission so that the last year is focused primarily on dissertation work.
- A combination of course formats, including (but not limited to) summer and weekend intensives, standard face-to-face weekly evening courses; online studies; hybrid courses that combine online work with face-to-face seminars; some on-the job site-or district-based practice where theory and practice meet, and individualized studies associated with completion of the dissertation.

Admission Requirements

To be considered for admission to the ELSJ program (1) an applicant must have educational leadership experience in PK-12, alternative education, or other agency settings that serve PK-14 students and be (2) committed to continuing as a public school administrator who will influence excellence and equity.

To be admitted to the ELSJ program, applicants must meet the academic requirements as well as demonstrate professional experiences and academic skills that suggest a strong potential for success as doctoral candidates and as bold, socially responsible educational leaders. Meeting the minimum requirements qualifies an individual for consideration, but does not guarantee admission to the ELSJ program. Admission will be granted on a competitive basis and limited to 20 candidates on an annual basis. The ELSJ program will not include a foreign language requirement.

The ELSJ program requires the following of all applicants for admission to the doctoral program:

- an earned baccalaureate degree and master's degree from accredited institutions of higher education with a GPA in graduate study of 3.0 or above;
- submission of Graduate Record Examination (GRE) scores from within the last five years; GRE(r) General Test Overview;
- demonstrated leadership skills and abilities in PK-12 schools or closely related fields (e.g., school reform networks, policy institutions);
- demonstrated and documented professional or personal commitment to equity and social justice;
- demonstrated academic excellence;
- professional experiences which demonstrate problem-solving ability and an interest in critically assessing current educational policies and practices;
- three confidential recommendation forms attesting to the leadership ability, equity commitment and capacity of the candidate to undertake doctoral-level work;
- professional resume;
- a written response to a writing prompt concerning issues of school effectiveness and the challenges facing leaders in bringing about sustained change that will result in equitable outcomes for all students in California;
- a portfolio of at least one, and no more than three, samples of work that demonstrate how the candidate's leadership has made a difference in student learning outcomes - for each item, include a brief paragraph that identifies the issue represented by the item, the desired goal, and what the item illustrates about the candidate's competencies;
- Employer/District Support Agreement stating support for the candidate's doctoral studies from her/his employer or, in the cases where this is not provided, an individual plan for meeting the demands of the program and his/her professional responsibilities, including support systems that the individual expects to access.

Application and Admissions Procedures

The process of applying and being admitted to the ELSJ program is a two-step procedure:

The first step requires that you apply for admission to the Department of Educational Leadership. If you are a successful applicant and you are admitted into the ELSJ program by the department, then you will be authorized to submit your application in order to be officially admitted to the university.

Applications and more information are available on the program website.

Ed.D. Degree Requirements

1. The degree requires a minimum of 90 quarter units of approved doctoral level work including 12 units for dissertation studies all to be completed within a three-year period. Students must take classes at a CSUEB facility for no less than two quarters each year of the program.
2. A 3.0 GPA or better in all 90 quarter units offered as satisfying the requirements of the degree.
3. Satisfactory performance on two qualifying examinations and approval of dissertation prospectus.
4. Completion and defense of dissertation.

Academic Residence

At least 42 semester units shall be completed in residence at California State University at East Bay in order to meet requirements for obtaining an Ed.D. degree.

Transfer of Units

Nine quarter units (equal to six semester units) of advanced level coursework (beyond the Master's degree) as a matriculated student from an accredited institution may be transferred into the doctoral program, subject to the approval of the Director of the ELSJ Program. The coursework must be deemed equivalent to ELSJ coursework. Students must have earned a grade of B or better in the transferred course. Transfer courses may not have been taken more than 7 years prior to anticipated graduation from the ELSJ Program.

Curricular Requirements

A. Schedule of courses for full cycle of program:

Courses take place all four quarters of the school year. Each cohort begins summer quarter and enrolls for a total of 12 quarters.

First Year

Summer

- EDLD 8000 - Values and Purposes of Educational Leadership *Units: 2*
- EDLD 8020 - Leadership for Equity I *Units: 4*
- EDLD 8080 - Conceptual Foundations of Research *Units: 4*

Fall

- EDLD 8031 - Schools as Organizations: Linking Theory and Practice *Units: 4*
- EDLD 8021 - Leadership for Equity II *Units: 4*

Winter

- EDLD 8030 - Leadership in Systemic Reform *Units: 4*
- EDLD 8050 - Leadership in Curriculum and Instructional Reform *Units: 4*
- EDLD 8070 - Governance, Law and Policy Development *Units: 4*

Spring

- EDLD 8083 - Defining Educational Issues *Units: 4*
- EDLD 8032 - Sustainability of Educational Reform *Units: 4*

Second Year

Summer

- EDLD 8081 - Qualitative and Quantitative Methods A *Units: 4*
- EDLD 8071 - Governance and Policy Development *Units: 4*

Fall

- EDLD 8084 - Applied Research Methods A *Units: 4*
- EDLD 8010 - Applied Study of Educational Issues I *Units: 3*
- EDLD 8040 - Program Planning and Evaluation *Units: 4*

Winter

- EDLD 8085 - Applied Research Methods B *Units: 4*
- EDLD 8011 - Applied Study of Educational Issues II *Units: 2*

Spring

- EDLD 8086 - Dissertation Seminar *Units: 4*
- EDLD 8041 - Leadership for Educational Accountability *Units: 4*

Third Year

Summer

- EDLD 8082 - Qualitative and Quantitative Methods B *Units: 4*
- EDLD 8060 - Leadership in Resource Management *Units: 4*

Fall

- EDLD 8087 - Dissertation Studies *Units: 3*

Winter

- EDLD 8087 - Dissertation Studies *Units: 3*

Spring

- EDLD 8087 - Dissertation Studies *Units: 3*
- EDLD 8012 - Advanced Topics in Educational Leadership *Units: 3*

B. Additional recommended course

EDLD 8900 - Independent Study, an elective course, is for students who may require additional study related to elements of dissertation work (e.g., identification of researchable questions, preparation of literature reviews, study design, proposal development, Institutional Review Board process, and academic writing). This course, which may be taken for 2-4 units and repeated once, will be recommended by faculty advisors. Units for this course will not be counted toward the total units required for the degree

C. Professional Residency

Students will engage in many field-based activities and assessments in their various courses and dissertation work. These field experiences will be designed to meet the specific interests and needs of students with respect to their mastery of goals and learning outcomes as well as with respect to their proposed dissertation studies.

Certificate

Applied Statistics Certificate

The Certificate in Applied Statistics combines basic work in statistics, which is required for many majors and graduate degree programs, with additional coursework in applied statistics. The coursework is designed to broaden the abilities of scientists and social scientists who already have degrees, but who need more training in applying statistics to their research and employment activities.

The minimum required GPA for the awarding of the certificate is 2.0. Consult an advisor in the Department of Statistics and Biostatistics for clarification and interpretation of requirements. The certificate consists of 24-25 units, plus 4-5 units of prerequisites. At least 4 units must be at the graduate level.

Prerequisites:

- STAT 2010 - Elements of Statistics for Business and Economics *Units: 5*
- STAT 3010 - Statistical Methods in the Social Sciences *Units: 4*
- STAT 3031 - Statistical Methods in Biology *Units: 4*
- STAT 3502 - Statistical Inference I *Units: 4*
- STAT 3601 - Statistics and Probability for Science and Engineering I *Units: 4*

A. Core Courses (12-13 units)

Applied Statistical Methodology (8-9 units)

Choose one of the following five pairs of courses:

- STAT 2010 - Elements of Statistics for Business and Economics *Units: 5*
and
- STAT 4000 - Analysis of Variance in the Behavioral Sciences *Units: 4*

- STAT 3010 - Statistical Methods in the Social Sciences *Units: 4*
and
- STAT 4000 Analysis of Variance in the Behavioral Sciences *Units: 4*
or
- STAT 6010 - Applied Analysis of Variance *Units: 4*

- STAT 3031 - Statistical Methods in Biology *Units: 4*
and
- STAT 4000 Analysis of Variance in the Behavioral Sciences *Units: 4*
or
- STAT 6010 Applied Analysis of Variance *Units: 4*

- STAT 3502 - Statistical Inference I *Units: 4*
and
- STAT 3503 - Statistical Inference II *Units: 4*

- STAT 3601 - Statistics and Probability for Science and Engineering I *Units: 4*
or
- STAT 5601 - Introductory Statistics and Probability for Science and Engineering *Units: 4*
or cross-listed: ENGR 5601 Introductory Statistics and Probability for Science and Engineering Units: 4
and

- STAT 3602 - Statistics and Probability for Science and Engineering II *Units: 4*
or cross-listed: ENGR 3602 Statistics and Probability for Science and Engineering II Units: 4

Data Analysis Using Statistical Packages (4 units)

- STAT 3900 - Data Analysis Using Statistical Packages *Units: 4*
or
- STAT 4950 - Advanced Statistical Packages for Data Analysis *Units: 4*

A person skilled in statistical programming may provide evidence of such proficiency and substitute a course for one of these, with the approval of an advisor.

B. Electives (12 units)

Choose from the following courses not taken above:

- ENGR 5300 - Quality Engineering *Units: 4*
or
- STAT 5300 - Quality Engineering *Units: 4*
- ENGR 6300 - Applied Quality Assurance *Units: 4*
or
- STAT 6300 - Applied Quality Assurance *Units: 4*
- STAT 3050 - Statistics: from Data to Decisions *Units: 4*
- STAT 3510 - Sampling Procedures for Surveys *Units: 4*
- STAT 3910 - Statistical Software Usage *Units: 4*
- STAT 4515 - Applied Multivariate Analysis *Units: 4*
- STAT 4601 - Regression *Units: 4*
- STAT 4603 - Operations Research II *Units: 4*
- STAT 4610 - Introduction to Nonparametric Statistical Methods *Units: 4*
- STAT 4860 - Undergraduate Seminar *Units: 4* - STAT 4869
- STAT 6010 - Applied Analysis of Variance *Units: 4*
- STAT 6011 - Statistical Modeling for Management and Economics *Units: 4*
- STAT 6020 - Statistical Methods in Clinical Trials *Units: 4*

Biotechnology Certificate

This certificate program consists of 34 units and is designed to give recognition to students who complete a curriculum emphasizing cellular and molecular techniques. This is an appropriate capstone for biology or chemistry students and is preparatory for careers in industrial and academic biological research, development, and production. The Biotechnology Certificate Program requires 34 units of advanced work. The laboratory courses, important to this program, emphasize a "hands-on" approach with close faculty supervision. In addition to experimental techniques, safety standards and quality control are also stressed. Courses are scheduled in a non-conflicting pattern so that a full-time student entering this program can complete the requirements in one academic year. There are over 300 biotechnology companies in the Bay Area with a growing demand for employees skilled in the technical subjects herein outlined. Seven faculty members from the Departments of Biological Sciences and Chemistry share the responsibility for this program and play an active role in arranging employment interviews for students who successfully complete this certificate program.

Admission to the Program

The Certificate Program in Biotechnology is open to undergraduates and graduates of accredited institutions who have a degree major in any field of biological sciences or chemistry and who have achieved a GPA of at least 2.75 in the major and at least 3.0 in the prerequisite courses. Applicants failing to meet these criteria may petition the Biotechnology Committee for a waiver of these requirements.

Prerequisites

Applicants must have majored in biology or chemistry, and have completed the courses listed below or their equivalents. Participants in this program will be selected by the Biotechnology Committee of the Department of Biological Sciences.

- BIOL 3121 - Principles of Genetics *Units: 5* (taken within last 3 years)
- BIOL 3405 - Microbiology *Units: 6*
- BIOL 4455 - Molecular Cell Biology *Units: 4* (taken within last 3 years)
- CHEM 4411 - General Biochemistry *Units: 4*

Continued Participation in the Program

Students must achieve a minimum grade of "B" in each required course for continued participation and pass a comprehensive written examination upon completion of the program. Students who have a baccalaureate degree and wish to combine the Biotechnology Certificate with an M.S. in Biological Science should be aware that only 13 units earned prior to admission to the Master's Program may be applied to a graduate degree. Students wishing to pursue the M.S. degree in Biological Science must also complete the application process to be considered for the M.S. degree.

Curricular Requirements

Required Courses (34 units)

- BIOL 4450 - Cell Culture Techniques *Units: 4*
- BIOL 4485 - PCR, DNA Sequencing and Fragment Analysis *Units: 4*
- BIOL 4490 - Bioinformatics *Units: 4*
- BIOL 6141 - Advanced Molecular Techniques *Units: 4*
- BIOL 6147 - Functional Genomics *Units: 4*
- BIOL 6151 - Cell and Molecular Biology I *Units: 5*
- BIOL 6152 - Cell and Molecular Biology II *Units: 5*

- CHEM 6430 - Protein Chemistry Techniques *Units: 4*
or cross-listed: BIOL 6430 - Protein Chemistry Techniques Units: 4

Cartography and GIS Certificate

The Cartography and GIS Certificate Program consists of 20 units. It is designed to prepare students in methods of data collection, interpretation, and analysis as well as the design, compilation, production, and reproduction of maps, thus enabling students to be current in the field of cartography.

Select at least 20 units from the following:

- GEOG 3410 - Air-Photo Interpretation *Units: 4*
- GEOG 3600 - Cartographic Principles and Graphic Communication *Units: 4*
- GEOG 3605 - Computer Cartography *Units: 5*
- GEOG 4425 - Remote Sensing of Earth Environments *Units: 4*
- GEOG 4605 - Applications of GIS *Units: 5*

Construction Planning and Control Certificate

This certificate program consists of 16 units and is designed to give recognition to students who complete a curriculum emphasizing Construction Planning and Control. This is a curriculum designed for construction and construction-related professionals interested in expanding their horizons and career opportunities without committing to the masters degree program requiring 48 units. This certificate program offers a concentrated training in construction project management. The certificate is applicable towards a master's degree in Construction Management after the student applies, gains acceptance, and completes the remainder of the curriculum for the degree. Courses in Construction Cost Estimating, Construction Project Planning and Control-Computer Tools, Financial Decision Making and Reporting in Construction and Construction Safety emphasize the project management side of the profession.

Admission to the Program

The Certificate Program in Construction Project Planning and Control is open to graduates of accredited institutions who have a bachelor's degree in any construction related field and who have achieved a GPA of at least 2.50. Applicants failing to meet these criteria may petition the Selection Committee for a waiver of these requirements.

Prerequisites

- A baccalaureate degree in any construction related field from an accredited university with a minimum overall GPA of 2.5 (4.0 basis) in their undergraduate work,
- relevant work experience, and
- College Algebra and Trigonometry or equivalent level math courses.

Continued Participation in the Program

Students must achieve a minimum grade of "B" (3.0) in each required course for continued participation and pass a comprehensive written examination upon completion of the program.

Note: All the courses in the Construction Planning and Control Certificate are required in the M.S. Construction Management degree. If a student wishes to seek admission to and complete the graduate program after completing this certificate, all 16 units can be transferred and used in the master's. Sixteen is the maximum number of units a student can transfer into the M.S. Construction Management degree.

Required Courses (16 units)

- CMGT 6400 - Construction Cost Estimating *Units: 4*
- CMGT 6500 - Construction Project Planning and Control, Computer Tools *Units: 4*
- CMGT 6600 - Financial Decision Making and Reporting in Construction *Units: 4*
- CMGT 6800 - Construction Safety *Units: 4*

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Construction Project Administration Certificate

This certificate program consists of 16 units and is designed to give recognition to students who complete a curriculum emphasizing Construction Project Administration. This is a curriculum designed for construction and construction-related professionals interested in expanding their horizons and career opportunities without committing to the masters degree program requiring 48 units. This certificate program offers a concentrated training in construction project administration. The certificate is applicable towards a master's degree in Construction Management after the student applies, gains acceptance, and completes the remainder of the curriculum for the degree. Courses in Legal Issues in Construction Management, Environmental Issues and Green Building, Construction Risk Management and Commissioning, and Current Issues in Construction Management emphasize the project administration side of the profession.

Admission to the Program

The Certificate Program in Construction Project Administration is open to graduates of accredited institutions who have a bachelor's degree in any construction related field and who have achieved a GPA of at least 2.50. Applicants failing to meet these criteria may petition the Selection Committee for a waiver of these requirements.

Prerequisites

- A baccalaureate degree in any construction related field from an accredited university with a minimum overall GPA of 2.5 (4.0 basis) in their undergraduate work,
- relevant work experience, and
- College Algebra and Trigonometry or equivalent level math courses.

Continued Participation in the Program

Students must achieve a minimum grade of "B" (3.0) in each required course for continued participation and pass a comprehensive written examination upon completion of the program. *Note that all the courses in the Construction Administration Certificate are required in the M.S. Construction Management degree. If a student wishes to seek admission to and complete the graduate program after completing this certificate, all 16 units can be transferred and used in the master's. Sixteen is the maximum number of units a student can transfer into the M.S. Construction Management degree.*

Required Courses (16 units)

- CMGT 6200 - Legal Issues in Construction Management *Units: 4*
- CMGT 6300 - Environmental Issues and Green Building *Units: 4*
- CMGT 6700 - Construction Risk Management and Commissioning *Units: 4*
- CMGT 6850 - Current Issues in Construction Management *Units: 4*

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Creative Video Certificate

Department Information

**Departments of Art, English, Communication,
Theatre and Dance
College of Letters, Arts, and Social Sciences
Office: Robinson Hall 220
Phone: (510) 885-3118**

Professor

Thomas C. Hird (Theatre and Dance), M.F.A. University of California, Los Angeles

Program Director: Thomas C. Hird

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Program Description

The field of video production, for television as well as for corporate, educational, and Web uses, is expanding rapidly and there is much demand by employers for people with these skills. Other programs and courses at Cal State East Bay feature documentary and news production (COMM); stage acting (THEA); fiction writing for the printed page and the Internet (ENGL). This program introduces a new dimension to each of these areas:

narrative or creative video. The new minor enables these departments to collaborate and actually create several videos of broadcast quality each year, giving students the opportunity to learn skills by practicing them.

The certificate program in Creative Video consists of 27 units.

I. Required Courses (11 units)

- COMM 3100 - Introduction to Professional Video Production *Units: 4*
- ENGL 2070 - Beginning Workshop in Fiction *Units: 4*

- THEA 1020 - Discover Acting *Units: 3*
- or*
- THEA 2005 - Acting Fundamentals: Improvisation *Units: 3*

II. Electives (16 units)

- ART 3820 - Digital Video *Units: 4* (has prerequisites that are not included in the program)
- THEA 3052 - Acting for the Camera *Units: 4*
- Select 4 units of upper division THEA coursework covering teleplay acting and production, with consent of department *Units: 4*
- Select 4 units of upper division COMM coursework with consent of department *Units: 4*

Early Childhood Development Certificate

Completion of the Early Childhood Development Certificate Program enables students to complete the required Early Childhood Education or Child Development coursework for the first 3 levels of Child Development Permits (the Assistant Permit, the Associate Teacher Permit, and the Teacher Permit), specified by the California Commission on Teacher Credentialing. These permits are required for teaching at early childhood care and education settings for children from birth to 5 years of age. Most of the courses for the Certificate can be applied to the Human Development Major with Early Childhood Development Option, if students wish to continue to obtain a BA.

1. Associate Teacher Permit Track (20 units)

Required:

- HDEV 3301 - Child Development *Units: 4*
- HDEV 4150 - Children in Families and Communities *Units: 4*

Electives (Choose 3 of the following):

- HDEV 4010 - Early Childhood Cognitive Development *Units: 4*
- HDEV 4030 - Early Childhood Social Development *Units: 4*
- HDEV 4120 - Child Language Development *Units: 4*
- HDEV 4140 - Theories of Childhood *Units: 4*

2. Teacher Permit Track (36 units)

- HDEV 3301 - Child Development *Units: 4*
- HDEV 4150 - Children in Families and Communities *Units: 4*
- HDEV 4010 - Early Childhood Cognitive Development *Units: 4*
- HDEV 4030 - Early Childhood Social Development *Units: 4*
- HDEV 4120 - Child Language Development *Units: 4*
- HDEV 4140 - Theories of Childhood *Units: 4*

- DANC 3235 - Dance for Children *Units: 4*
- THEA 3610 - Interpretation of Children's Literature and Story Telling *Units: 4*
- THEA 3650 - Dramatic Activities for Children *Units: 4*

Note:

(All courses taken for the Associate Teacher Permit Track may be applied to the Teacher Permit Track.)

Early Childhood Special Education Certificate

Added Authorization in Early Childhood Special Education

This certificate program is offered through Continuing Education.

Admission Requirements

- Bachelor's Degree
- Certificate of Clearance or valid California Education Specialist Teaching Credential
- Valid California Education Specialist Credential with one of the following authorizations: Mild/Moderate Disabilities, Moderate/Severe Disabilities, Deaf-and-Hard of Hearing, Physical and Health Impairments, Visual Impairments; OR concurrent enrollment in a program leading to any of those credentials.
- Passing scores on the California Basic Education Skills Test (CBEST)
- Evidence of negative tuberculosis test

Curricular Requirements

- EPSY 6550 - Young Children with Special Needs *Units: 4*
- EPSY 6551 - Family systems and Cultural Competence in ECSE *Units: 4*
- EPSY 6552 - Assessment and Intervention Planning for Young Children with Special Needs *Units: 4*
- EPSY 6553 - Curriculum and Instruction n ECSE *Units: 4*

Educational Technology Leadership Certificate

Certificate Requirements (16 Units)

This program is designed for educators and e-learning developers who serve as technology leaders in educational settings, as well as in industry. The program combines instructional design theories with a knowledge of emerging technologies and trains graduate students to assume leadership roles in the design and development of effective e-learning environments. The program advocates lifelong learning that allows students to nurture their personal and professional growth. The arenas in which Educational Technology Leadership graduates will be active include school districts, county offices of education, community colleges, the high tech industry as an e-learning developer, and the field of instructional design.

I. Prerequisites

Students must demonstrate knowledge and application of authoring systems, such as Hypercard, Director, Authorware, ToolBook, or must have experience with Web-based instruction. Basic knowledge of digital technologies and HTML is required. Advanced proficiency in one platform (e.g., Macintosh, Windows, UNIX) is required. Students will be accepted into the program based on an interview by a committee where they demonstrate their technology competence. Students are also required to maintain their level of competency in technology as long as they are graduate students in the program.

II. Curricular Requirements

A. Core Courses (12 units)

- EDUI 6200 - Learning Theories and the Design of E-learning Environments *Units: 4*
- EDUI 6350 - Educational Technology in the Teaching of Language and Social Studies *Units: 4*
- EDUI 6280 - Mathematics, Science and Technology in Education *Units: 4*

B. Electives (4 units minimum)

Select from the following:

- EDUI 6002 - Animation for the Web *Units: 2*
- EDUI 6005 - Digital Graphics *Units: 4*
- EDUI 6120 - Distance Learning Technologies and Applications *Units: 4*
- EDUI 6150 - Current Issues in Educational Technology *Units: 4*
- EDUI 6210 - Principles of Instructional Design *Units: 4*
- EDUI 6300 - Culture and the Evolution of Educational Technology *Units: 4*
- EDUI 6315 - Current Technologies in Education *Units: 2*
- EDUI 6400 - Educational Technology Planning for Innovation and Change *Units: 4*
- EDLD 6410 - Supervision and Staff Development *Units: 4*
- MM 6101 - Multimedia Seminar *Units: 4*
- MM 6102 - Application of Learning Theories to Multimedia Design *Units: 4*
- MM 6805 - Forum *Units: 1*
- PSYC 4200 - Conditioning and Learning *Units: 4*
- PSYC 4210 - Theories of Learning *Units: 4*
- PSYC 4220 - Cognitive Processes *Units: 4*
- PSYC 4320 - Physiological Psychology *Units: 4*
- PSYC 4345 - Sensation and Perception *Units: 4*
- PUAD 6765 - Organizational Diagnosis and Assessment *Units: 4*
- PUAD 6811 - Human Organizations and Social Realities *Units: 4*
- PUAD 6812 - Changing Human Organizations *Units: 4*
- STAT 3900 - Data Analysis Using Statistical Packages *Units: 4*

Engineering Management Certificate

Engineering Certificates

The Department of Engineering offers accelerated post-baccalaureate certificate programs in Engineering Management and Quality Management. The Engineering Management Certificate is designed for engineering practitioners who wish to expand their careers to management and want to acquire a basic understanding of the theory and fundamentals of management. The Quality Management Certificate is designed for engineers and scientists working in production facilities who are engaged in quality improvement projects and who wish to acquire a basic understanding of the fundamentals of quality management and the application of quality improvement techniques. In addition, these certificate programs offer advanced students currently enrolled in the B.S. in Engineering program an opportunity to broaden their employment options.

Prerequisite for enrollment in the Engineering Management Certificate or Quality Management Certificate programs: calculus background equivalent to MATH 1304 and MATH 1305, or a B.S. in Engineering or one of the other sciences.

Engineering Management (16 units)

Required Courses

- INDE 4180 - Product-Process Design *Units: 4*
- or
- ENGR 5180 - Product/Process Design *Units: 4*

- ENGR 6200 - Project Management *Units: 4*
- ENGR 6300 - Applied Quality Assurance *Units: 4*
- MGMT 6115 - E-Commerce Enterprise Management *Units: 4*

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Foundational Level General Science Certificate

The Foundational Level General Science certificate program is designed for students who would like to teach middle school science or would like to become K-5 science specialists. Credentialed teachers who complete this program and pass the Science CSET I and II exams qualify for the Foundational-level Added Authorization in Science.

Candidates for this program should have or plan to obtain their Multiple Subject teaching credential or a Single Subject teaching credential in a subject other than a science discipline. Students who complete this program will be well prepared to teach science at the K-8 level, will have completed the State required Methods Courses in Single Subject Science and will have the content knowledge required to pass the Science CSET I and II exams. The certificate consists of 20 units.

Required Courses

- BIOL 3011 - Foundational Biology *Units: 4*
- BIOL 3012 - Foundational Biology Laboratory *Units: 1*
- CHEM 3011 - Foundational Chemistry *Units: 4*
- CHEM 3012 - Foundational Chemistry Laboratory *Units: 1*
- GEOL 3011 - Foundational Earth Science *Units: 4*
- GEOL 3012 - Foundational Earth Science Laboratory *Units: 1*
- PHYS 3011 - Foundational Physics *Units: 4*
- PHYS 3012 - Foundational Physics Laboratory *Units: 1*

Foundational Mathematics Teaching Certificate

The Foundational Mathematics certificate program is designed for students who would like to teach middle school math or would like to become K-8 math specialists. Credentialed teachers who complete this program and pass the Math CSET I and II exams qualify for the Foundationallevel Added Authorization in Mathematics.

Candidate for this program should have or plan to obtain their Multiple Subjects teaching credential or a Single Subject teaching credential in a subject other than mathematics. Students who complete this program will be well prepared to teach mathematics at the K-8 level, will have completed the State required Methods Courses in Single Subject Mathematics and will have the content knowledge required to pass the Math CSET I and II exams.

The certificate consists of 21 units.

Prerequisite:

- MATH 2011 - Number Systems *Units: 4*

Required Courses (21 units):

- MATH 1130 - College Algebra *Units: 4*

- MATH 4012 - Geometry and Measurement *Units: 4*
- MATH 4013 - Statistics, Data Analysis, and Probability *Units: 4*
- MATH 4030 - Advanced Study of School Mathematics *Units: 4*
- TED 5390 - Instructional Methods for the Single Subject Classroom I *Units: 3*
- TED 5391 - Instructional Methods for the Single Subject Classroom II: Focus on Differentiated Instruction *Units: 2*

Note:

Students who complete the Foundational Mathematics Teaching Certificate program will still need to pass the first two math CSET exams to establish subject matter competency for the credential.

Graduate Economics Studies Certificate

IMPORTANT NOTICE:

The department is not accepting students into the Graduate Economic Studies Certificate program. This program will be discontinued effective Fall 2016.

Graduate Economics Studies (45 units)

To be eligible for the Certificate in Graduate Economics Studies a student must complete a satisfactory program of study (45 units) as approved by the department and the graduate coordinator, to include:

A. Required Courses (25 units)

- ECON 6101 - Seminar: Micro-Economic Theory I *Units: 4*
- ECON 6102 - Seminar: Micro-Economic Theory II *Units: 4*
- ECON 6105 - Seminar: Macro-Economic Theory *Units: 4*
- ECON 6400 - Seminar: Econometrics *Units: 4*
- ECON 6896 - Research Methods *Units: 5*
- ECON 6511 - Advanced Applied Econometrics *Units: 4*

B. Five Seminars from: (20 units)

- ECON 6200 - Seminar: Comparative Economic Systems *Units: 4*
- ECON 6250 - Seminar: Project Analysis *Units: 4*
- ECON 6315 - Seminar: Monetary Theory *Units: 4*
- ECON 6370 - Seminar: Public Sector Economics *Units: 4*
- ECON 6520 - Seminar: Industrial Organization and Public Policy *Units: 4*
- ECON 6680 - Seminar: Labor Economics *Units: 4*
- ECON 6710 - Seminar: International Economic Development *Units: 4*

C. Maintain

Maintain a 3.00 overall GPA and a 2.5 GPA in the required courses listed under section "A" above and meet the University Writing Skills Requirement.

Interdisciplinary Studies Special Certificate

The purpose of a Special Certificate is to give the student an opportunity to design in advance, with university approval, a program that will be certified upon completion. To obtain an undergraduate Special Certificate, an undergraduate or graduate student must complete a program of at least 20 quarter-units in upper-division courses with a GPA of 2.00. The program must provide a logical and coherent pattern of preparation for a limited

objective. The title of the proposed certificate should carry no connotation of meeting a licensing requirement for professional practice. The student's proposed program must be developed with, and approved by, a faculty member knowledgeable in the field being certified.

Note: To obtain a graduate Special Certificate, a graduate student must possess a bachelor's degree from an accredited institution and complete at least 20 quarter units, of which at least half must be at the graduate 6000-level, with a minimum GPA of 3.00. See the Interdisciplinary Studies Majors' chapters in the Programs of Study section of this catalog for additional information.

Procedure

The student develops a proposed program with the advice and approval of a faculty member knowledgeable in the field of study. The completed "Undergraduate/Graduate Special Certificate Proposal," with advisor and student approval, is forwarded by the advisor to the dean of the college in which the preponderance of courses will be taken. If the dean approves, he or she signs and sends the proposal to the Interdisciplinary Studies Major Coordinator in the Office of General Education. The Interdisciplinary Studies Major Coordinator then sends a copy of the proposal to each of the other three college deans. The deans have 10 working days to enter an objection. If none is received and the Senior Director of Undergraduate Studies and General Education judges the proposal to be sound, the program will be approved. If any college dean objects, he or she must file written objections with the Interdisciplinary Studies Major Coordinator within the 10 days. These will be considered by the Senior Director in deciding whether or not to approve the program. The student is notified in writing by the Interdisciplinary Studies Major Coordinator about the final action on his/her proposal. A copy of an approved program is filed in the student's online file and in the Interdisciplinary Studies Major Coordinator's office. Upon completion of the Special Certificate program, the student applies to the Registrar and pays the fee to receive the certificate.

Mathematical Statistics Certificate

The Certificate in Mathematical Statistics is designed to enhance a student's understanding of theoretical statistics and probability in preparation for employment in the engineering, information science, and technology sectors. The certificate also prepares students for further graduate study.

The minimum required GPA for the awarding of the certificate is 3.0. Consult an advisor in the Department of Statistics and Biostatistics for clarification and interpretation of requirements. The certificate consists of 16 graduate level units, plus any necessary prerequisites. All required courses are cross-listed with Mathematics.

Prerequisites

- STAT 6401 requires MATH 3300 and either STAT 3402 or STAT 4401
- STAT 6501 requires MATH 3300 or MATH 3100, and STAT 6205 or graduate standing in mathematics
- STAT 6510 requires MATH 2101 and STAT 3503

A. Core Courses (12 units)

- STAT 6401 - Advanced Probability | *Units: 4*
- STAT 6501 - Mathematical Statistics I | *Units: 4*
- STAT 6502 - Mathematical Statistics II | *Units: 4*

B. Electives (4 units)

Choose at least one course from the following (advisor approval required):

- STAT 6510 - Analysis of Variance | *Units: 4*
- STAT 6860 - Selected Topics in Graduate Probability and Statistics | *Units: 4* - STAT 6869

Organizational Communication Certificate

The Certificate in Organizational Communication consists of 28 units and is for individuals who already have good basic communication skills and want to perfect and hone those skills. In addition it offers the student a set of courses that are strongly career oriented. The certificate is very relevant to individuals who are already in communication-related career positions and desire both a higher level of communication skills and the

accompanying certificate as vehicles to advancement. It is also particularly appropriate for two other groups. The first includes those who are on the fringe of a communication-related career path and want better acceptance as specific career individuals. The second includes those who are not now employed and see the completion of a particular program of study from this set of courses as a certification to potential employers, not only of a higher level of communication skills achievement but also of their own seriousness of purpose and commitment to a specific career area.

I. Required Courses (20 units)

- COMM 3107 - Introduction to Organizational Communication *Units: 4*
- COMM 3510 - Small Group Communication *Units: 4*
- COMM 4107 - Relational Communication in Organizations *Units: 4*

- COMM 4510 - Public Relations Theory and Practice *Units: 4 (if not used to satisfy one of the required electives)*
or COMM 4520 Advertising Form and Function *Units: 4*

- MGMT 3600 - Theories of Management *Units: 4*
or COMM 4207 Organizational Transformation *Units: 4*

II. Select two courses (8 units) from the following:

- COMM 3010 - Intermediate News Writing and Editing *Units: 4* ¹
- COMM 4300 - Intercultural & International Communication *Units: 4*
- COMM 4510 - Public Relations Theory and Practice *Units: 4*
- MGMT 3614 - Organizational Behavior *Units: 4* ¹
- MGMT 3680 - Employee Relations and Employment Law *Units: 4*
- MKTG 3401 - Marketing Principles *Units: 4*
- MKTG 3410 - Advertising Management *Units: 4*
- MKTG 4425 - Sales Training *Units: 4*

Note:

Students who have completed at other schools the approved equivalent of any of the specifically required five courses should make additional selections from the electives grouping in order to offset those units already completed outside Cal State East Bay. Students who find themselves to be limited in their selection from the elective group due to the number of approved equivalent courses completed at other schools should consult with an advisor for this certificate in order to identify appropriate substitutions to meet the required 28 units in residence for the certificate.

Footnote

- Has prerequisite(s) not included in the program or G.E.

Public History Certificate

The certificate consists of 28 units.

A. Prerequisites:

- HIST 2010 - Introduction to History *Units: 4*
- HIST 3010 - Historical Writing *Units: 4* (Note: may be waived with permission of the Public History and Internship Coordinator)

B. Core Courses (12 units)

- HIST 3503 - History of the San Francisco Bay Area *Units: 4*
- HIST 4010 - History Internship *Units: 4*
- HIST 4032 - Introduction to Public History *Units: 4*

C. Electives (16 units)

(Substitutions may be made with permission of the Public History and Internship Coordinator)

- HIST 3500 - History of California *Units: 4 **
*or HIST 3511 The American West Units: 4**
- HIST 3505 - California Environmental History *Units: 4*
or HIST 3535 American Indian History Units: 4
or HIST 3538 American Indians in the 20th Century Units: 4
- Skills Course in Community Studies or Landscape Studies (4), as recommended by the Public History and Internship Coordinator.
- Skills Course in Practical Application (4), as recommended by the Public History and Internship Coordinator.

Note

*Students preferring to focus outside the Bay Area may substitute other electives for HIST 3500/3511 with the permission of the Public History and Internship Coordinator.

Quality Management Certificate

Engineering Certificates

The Department of Engineering offers accelerated post-baccalaureate certificate programs in Engineering Management and Quality Management. The Engineering Management Certificate is designed for engineering practitioners who wish to expand their careers to management and want to acquire a basic understanding of the theory and fundamentals of management. The Quality Management Certificate is designed for engineers and scientists working in production facilities who are engaged in quality improvement projects and who wish to acquire a basic understanding of the fundamentals of quality management and the application of quality improvement techniques. In addition, these certificate programs offer advanced students currently enrolled in the B.S. in Engineering program an opportunity to broaden their employment options.

Prerequisite for enrollment in the Engineering Management Certificate or Quality Management Certificate programs: calculus background equivalent to MATH 1304 and MATH 1305, or a B.S. in Engineering or one of the other sciences.

Quality Management (16 units)

Required Courses

- ENGR 5300 - Quality Engineering *Units: 4*
- ENGR 6300 - Applied Quality Assurance *Units: 4*
or completion of
- STAT 3503 - Statistical Inference II *Units: 4*
and
- STAT 6509 - Theory and Application of Regression *Units: 4*
- ENGR 6350 - Reliability Engineering *Units: 4*
- STAT 5601 - Introductory Statistics and Probability for Science and Engineering *Units: 4*
or completion of
- STAT 3401 - Introduction to Probability Theory I *Units: 4*
and
- STAT 3502 - Statistical Inference I *Units: 4*

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Spanish for the Professions Certificate

IMPORTANT NOTICE: The department is not accepting students for the Certificate in Spanish program at this time.

The Certificate in Spanish for the Professions, consisting of 22-38 units, tells potential employers that the recipient is qualified to work with Spanish-speaking members of the community who have limited English proficiency. Designed for individuals who are, or will be, employed in courts, schools, social service bureaucracies, health care facilities, and business enterprises, the certificate program provides students with Spanish language competency in technical fields, enabling them to converse with and serve as translators and interpreters for Spanish-speaking clients. Students majoring or minoring in Spanish may obtain the certificate by completing only the three required upper division certificate courses, in addition to their major or minor program.

Required Courses (22-38 units)

A. Lower Division (0-24 units)

- MLL 1401 - Elementary Spanish I *Units: 4*
- MLL 1402 - Elementary Spanish II *Units: 4*
- MLL 1403 - Elementary Spanish III *Units: 4*
- MLL 2401 - Intermediate Spanish I *Units: 4*
- MLL 2402 - Intermediate Spanish II *Units: 4*
- MLL 2403 - Intermediate Spanish III *Units: 4*

B. Upper Division (14-22 units)

- MLL 3404 - Spanish Terminology and Translation *Units: 4*
- MLL 3405 - Advanced Conversation for Community Needs *Units: 4*
- MLL 3406 - Practical Spanish: Community Service *Units: 6*

Spanish language, and/or Spanish Peninsular or Spanish-American Literature and Culture

(4-8 units from the following list if needed to bring total units to a minimum of 22)

1. Spanish Language:

- MLL 3404 - Spanish Terminology and Translation *Units: 4*
- MLL 3405 - Advanced Conversation for Community Needs *Units: 4*

2. Spanish-American Literature and Culture:

- MLL 3400 - Introduction to Literary Analysis *Units: 4*
- MLL 3461 - Introduction to Spanish-American Literature: 1492 to 1900 *Units: 4*
- MLL 3463 - Introduction to Spanish-American Literature: 1900 to the Present *Units: 4*
- MLL 3495 - Spanish-American Culture and Civilization *Units: 4*
- MLL 4495 - A Single Movement, Country or Theme: Spanish American Literature *Units: 4*

3. Spanish Peninsular Literature and Culture:

- MLL 3418 - Spanish Culture and Civilization *Units: 4*
- MLL 4455 - Studies in the Golden Age of Spain *Units: 4*
- MLL 4457 - Survey Spanish Literature I: Medieval and Golden Age *Units: 4*
- MLL 4458 - Survey Spanish Literature II: 18th Century to Present *Units: 4*
- MLL 4460 - Studies in 20th Century Spanish Literature *Units: 4*

Sustainable Resource Management Certificate

Prerequisites: STAT 1000 - Elements of Probability and Statistics 5, or equivalent, and AA degree, or equivalent, or completion of lower division requirements for a four-year degree program.

The certificate consists of a total of 28 units.

I. Required Courses (16 units)

- GEOG 3000 - Sustainable Resource Management *Units: 4*
- ENVT 3400 - Environmental Resource Analysis *Units: 4*
- ENVT 4100 - Environmental Impact Analysis *Units: 4*
- MGMT 3110 - Project Management *Units: 4*

II. Elective Courses (12 units)

Select three courses from the following list:

- GEOG 3480 - Applied Field Studies *Units: 4*
- or*
- ENVT 3480 - Applied Field Studies *Units: 4*

- GEOG 4320 - Energy and Society *Units: 4*
- or*
- ENVT 4320 - Energy and Society *Units: 4*

- GEOG 4330 - Sustainable Development *Units: 4*
- GEOG 4350 - Water Resources and Management *Units: 4*
- GEOG 6780 - Seminar in Environmental Planning *Units: 4*
- GEOG 6820 - Seminar in Sustainable Cities *Units: 4*
- MGMT 6460 - Strategic Management for a Sustainable Society *Units: 4*

Credential

Administrative Services Internship Credential

Cohorted Credential Programs

Note: Credential requirements specified in this catalog are subject to changes made by the State of California.

Candidates must complete BOTH the **Department** and the **University** application processes.

Contact:

Credential Student Service Center,

25800 Carlos Bee Blvd.,

Arts & Education Building, room 235,

Hayward, CA 94542

Credential Requirements (45 units)

- EDLD 6000 - Introduction to Educational Leadership *Units: 4*
- EDLD 6400 - Instructional Leadership *Units: 4*
- EDLD 6410 - Supervision and Staff Development *Units: 4*
- EDLD 6550 - School Site Leadership and Organizational Behavior *Units: 4*
- EDLD 6650 - Educational Law for Equity *Units: 4*
- EDLD 6675 - School Finance and Human Resources for Equity *Units: 4*
- EDLD 6804 - Internship Fieldwork *Units: 6*
- EDLD 6805 - Internship Fieldwork *Units: 6*
- EDLD 6806 - Internship Fieldwork *Units: 6*
- EDLD 6814 - Internship Seminar *Units: 1*
- EDLD 6815 - Internship Seminar *Units: 1*
- EDLD 6816 - Internship Seminar *Units: 1*

Multiple Subject Credential

Basic Teaching Credential Programs

Credential requirements specified in this catalog are subject to changes made by the State of California. Contact the Department of Teacher Education for current regulations.

Admission

Note: Department application deadlines differ from those listed by the university. Please contact the department for appropriate program application periods.

Multiple or Single Subject Credential Programs

Before applying to the Multiple Subject or Single Subject Credential Programs, all applicants must attend an "Admission Advisement Session." Two to three sessions are held every month, except July and August. For a schedule of sessions, call (510) 885-2272.

Multiple Subject applicants (except for the undergraduate blended program; see the Liberal Studies chapter of this catalog) must file with the Department of Teacher Education:

- a completed University "Graduate and Post-Baccalaureate Application"
- a graduate application fee
- a statement of residency, if new to Cal State East Bay
- two official copies of each transcript from each college or university attended (and one additional copy or photocopy for the Department of Teacher Education)
- a Department Application Form for the Multiple Subject Credential Program
- two letters of recommendation verifying prerequisite field experience.

Single Subject applicants must file with the Department of Teacher Education:

- a completed University "Graduate and Post-Baccalaureate Application"
- a graduate application fee
- a statement of residency if new to Cal State East Bay
- two official copies of each transcript (and one additional copy or photocopy for the Department of Teacher Education)
- a Department Application Form for the Single Subject Credential Program
- two letters of recommendation verifying prerequisite field experience.

- Applicants to the Bachelors Plus Pathway will have separate application procedures and requirements. Please consult the Department of Teacher Education for details.

Prerequisites

Each candidate must complete the following prerequisites before entering the Multiple Subject and Single Subject Teaching Credential Programs:

- Subject Matter Competency. Multiple Subject applicants must pass the California Subject Examinations for Teachers (CSET) Multiple Subjects examinations. Single Subject applicants must either (a) complete a CCTC-approved subject matter preparation program or (b) pass the relevant CSET examinations.
- U.S. Constitution course or exam
- CBEST. California Basic Educational Skills Test, passing score
- All candidates must have a cumulative GPA of 2.67 with a GPA of 2.75 in the last 60 semester units.
- Two letters of recommendation verifying successful experiences in school/school-like settings. TED 3001, Exploring Education, may be taken as part of this requirement.

Admission Process

Applicants are required to attend an admission interview. Successful applicants are notified by mail shortly after the interview.

Applicants accepted into a credential program must immediately:

- file State Forms 41-CIC (Application for Character and Identification Clearance) and BID-7 (2-82) (two fingerprint cards), and submit a TB clearance dated within the past calendar year. A non-refundable partial fee (money order or certified check made payable to Commission on Teacher Credentialing) must accompany Form 41-4. Upon completion of the program, applicants must pay the remaining credential application fee. (Contact the Credentials Office, AE 250, 510/885-2272.) or
- file a copy of a previous/current California credential and a TB clearance dated within one calendar year of application.

Credential Requirements

The Multiple Subject Credential is the basic credential that authorizes the teaching of all subjects in a self-contained, elementary school classroom.

I. Types of Multiple Subject Credential Programs

A. Multiple Subject Credential - Standard Pathway

Candidates may complete the Multiple Subject Credential Program - Standard Pathway at the Hayward or Concord campuses. The program is four quarters, with summer and winter quarter entry. (Winter quarter entry is at the Hayward campus only).

B. Multiple Subject Credential - Transitional Kindergarten to Grade 3 Pathway (TK3 Pathway)

This Pathway has an emphasis on teaching in the early elementary grades, and is offered at the Hayward campus with summer quarter entry.

C. Concurrent Multiple Subject and Education Specialist

Credentials (Mild-Moderate and Moderate-Severe, Level I)

In this program, candidates earn both Multiple Subject and Educational Specialist Credentials. This is a two-year program. Please see the Department of Educational Psychology chapter in this catalog.

D. Blended Multiple Subject Credential/Liberal Studies Major

See Liberal Studies chapter in this catalog.

II. Curricular Requirements for Multiple Subject Credential - Standard Pathway (64 units)

- TED 5110 - Computer-Based Technology in the Classroom I *Units: 3*
- TED 5211 - TPA Subject-Specific Pedagogy Task I Assessment *Units: 1*
- TED 5212 - TPA Designing Instruction Task II Assessment *Units: 1*
- TED 5213 - TPA Assessing Learning Task III Assessment *Units: 1*
- TED 5214 - TPA Culminating Teaching Experience Task IV Assessment *Units: 1*
- TED 5311 - Classroom Environment *Units: 2*
- TED 5350 - Curriculum and Instruction: Mathematics in the Elementary School *Units: 3*
- TED 5351 - Psychological Foundations of Education and Planning for Instruction *Units: 4*
- TED 5352 - Curriculum and Instruction: Reading/Language Arts in the Elementary School-A *Units: 3*
- TED 5354 - Student Teaching I *Units: 5*
- TED 5355 - Equity and Diversity/Teaching English Learners A *Units: 4*
- TED 5356 - Curriculum and Instruction: Reading/Language Arts in the Elementary School-B *Units: 3*
- TED 5357 - Curriculum and Instruction: Teaching Science, Health and Safety in the Elementary School *Units: 3*
- TED 5359 - Student Teaching II *Units: 6*
- TED 5360 - Curriculum and Instruction: Reading/Language Arts and Social Studies in the Elementary School *Units: 4*
- TED 5361 - Student Teaching III *Units: 6*
- TED 5366 - Equity and Diversity/Teaching English Learners B *Units: 3*
- TED 5372 - Team Seminar I: Orientation to TPA Subject-Specific Pedagogy Task I and Reflection on Field Practice *Units: 1*
- TED 5373 - Team Seminar II: Orientation to TPA Designing Instruction Task II and Reflection on Field Practice *Units: 1*
- TED 5374 - Team Seminar III: Orientation to TPA Assessing Learning Task III and Reflection on Field Practice *Units: 1*
- TED 5375 - Team Seminar IV: Orientation to TPA Culminating Teaching Experience Task IV and Reflection on Field Practice *Units: 1*
- TED 5376 - Curriculum and Instruction: Physical Education Methods *Units: 1*
- TED 5377 - Curriculum and Instruction: Visual and Performing Arts Methods *Units: 2*
- TED 5378 - Teaching Special Populations in General Education Settings *Units: 4*

Field experience requirements:

All candidates will complete two supervised field experiences, either as a student teacher or an intern. Field assignments begin in late August with the beginning of the K-12 school year and continue, with breaks at different times, until June.

Teaching Performance Assessment (TPA) Tutorials:

Any candidate who fails a TPA task must enroll in the appropriate TPA Tutorial course(s):

- TED 5061 - TPA Subject-Specific Pedagogy Task I Tutorial *Units: 2*
- TED 5062 - TPA Designing Instruction Task II Tutorial *Units: 2*
- TED 5063 - TPA Culminating Teaching Experience Task III Tutorial *Units: 2*
- TED 5064 - TPA Culminating Teaching Experience Task IV Tutorial *Units: 2*

III. Curricular Requirements for Multiple Subject Credential - TK3 Pathway (64 units)

- TED 5549 - Foundations of Teaching: Principles and Practices in Early Childhood Education *Units: 6*
- TED 5550 - Psychological Foundations of Education and Classroom Environments *Units: 4*
- TED 5551 - Curriculum and Instruction: Mathematics and Technology in the Elementary School *Units: 4*
- TED 5552 - Curriculum and Instruction: Reading/Language Arts in the Elementary School - A *Units: 4*
- TED 5553 - Curriculum and Instruction: Reading/Language Arts in the Elementary School - B *Units: 4*
- TED 5554 - Curriculum and Instruction: Teaching English Learners in the Elementary School *Units: 4*
- TED 5555 - Curriculum and Instruction: Science, Health, Safety, and Technology in the Elementary School *Units: 4*
- TED 5556 - Curriculum and Instruction: Equity, Diversity and Social Studies in the Elementary School *Units: 4*
- TED 5557 - Curriculum and Instruction: Visual & Performing Arts and Physical Education Methods in the Elementary School *Units: 3*
- TED 5560 - Multiple Subject Transitional Kindergarten to Grade 3 Student Teaching Seminar I *Units: 1*
- TED 5561 - Multiple Subject Transitional Kindergarten to Grade 3 Student Teaching Seminar II *Units: 1*
- TED 5562 - Multiple Subject Transitional Kindergarten to Grade 3 Student Teaching Seminar III *Units: 1*
- TED 5563 - Multiple Subject Transitional Kindergarten to Grade 3 Student Teaching Seminar IV *Units: 1*

- TED 5564 - Multiple Subject Transitional Kindergarten to Grade 3 PACT Seminar I *Units: 1*
- TED 5565 - Multiple Subject Transitional Kindergarten to Grade 3 PACT Seminar II *Units: 1*
- TED 5566 - Multiple Subject Transitional Kindergarten to Grade 3 Student Teaching I *Units: 2*
- TED 5567 - Multiple Subject Transitional Kindergarten to Grade 3 Student Teaching II *Units: 4*
- TED 5568 - Multiple Subject Transitional Kindergarten to Grade 3 Student Teaching III *Units: 5*
- TED 5569 - Multiple Subject Transitional Kindergarten to Grade 3 Student Teaching IV *Units: 6*
- TED 5378 - Teaching Special Populations in General Education Settings *Units: 4*

Field experience requirements:

All candidates will complete three supervised field experiences, either as a student teacher or an intern. Field assignments begin during the Summer Quarter in early July and continue, with breaks at different times, until June.

Performance Assessment of California Teachers (PACT) Tutorials:

Any candidate who fails a component of PACT must enroll in a special section of the TPA tutorials listed above.

IV. Curricular Requirements for the Multiple Subject Credential Component of the Concurrent Education Specialist/Multiple Subject Credential Program

Candidates take all the courses required for the Multiple Subject Credential-Standard Pathway listed in the previous section, with the following exceptions:

- EPSY 5021 - Introduction to Educating all Students in Diverse Classrooms *Units: 4* is taken in place of TED 5378.
- Candidates complete a second-year field experience in special education and do not enroll in TED 5361

For the curricular requirements for the Education Specialist Component of the Concurrent Education Specialist/Multiple Subject Credential Program, please see the Department of Educational Psychology chapter in this catalog.

V. Curricular Requirements for Blended Liberal Studies Major/Multiple Subject Credential

Candidates take all the courses required for the Multiple Subject Credential listed in section II above.

Candidates complete all the requirements for the undergraduate Liberal Studies degree (see the Liberal Studies chapter in the undergraduate programs section of this catalog).

Preliminary Administrative Services (Tier I) Credential

School districts throughout the Bay Area are working with CSU, East Bay with the goal of developing leadership core within districts' teacher force and building capacity in our schools. Year 1 cohorts will be offered in a variety of locations starting Fall Quarter. With the course work offered within a district or at another geographically convenient location, this accelerated one-year program provides multiple leadership development opportunities.

Cohorted Credential Programs

Note: Credential requirements specified in this catalog are subject to changes made by the State of California.

Candidates must complete BOTH the **Department** and the **University** application processes.

Contact:

Credential Student Service Center,

25800 Carlos Bee Blvd.,

Arts & Education Building, room 235,

Hayward, CA 94542

Tier 1 Credential (36 units)

All Courses Required.

Proposed Course Sequence:

Fall 2015 Quarter (12 units)

- EDLD 6000 - Introduction to Educational Leadership *Units: 4*
- EDLD 6675 - School Finance and Human Resources for Equity *Units: 4 * This course is offered online/hybrid, leadership students need only attend face-to-face class from 4:30-8pm once a week.*
- EDLD 6801 - Fieldwork I *Units: 4*

Winter 2016 Quarter (12 units)

- EDLD 6400 - Instructional Leadership *Units: 4*
- EDLD 6650 - Educational Law for Equity *Units: 4 * This course is offered online/hybrid, leadership students need only attend face-to-face class from 4:30-8pm once a week.*
- EDLD 6802 - Fieldwork II *Units: 4*

Spring 2016 Quarter (12 units)

- EDLD 6410 - Supervision and Staff Development *Units: 4 * This course is offered online/hybrid, leadership students need only attend face-to-face class from 4:30-8pm once a week.*
- EDLD 6550 - School Site Leadership and Organizational Behavior *Units: 4*
- EDLD 6803 - Fieldwork III *Units: 4*

Preliminary Education Specialist Credential: Mild-Moderate Disabilities

Special Education Programs of Study

Faculty: Jacki L. Anderson (Coordinator, Moderate-Severe Disabilities), Ann T. Halvorsen, Linda Smetana (Coordinator, Mild-Moderate Disabilities)

The Special Education program prepares their graduates for careers in direct teaching and for leadership roles in Special Education. Programs are offered which lead to the Master of Science degree and/or to the Education Specialist: Mild-Moderate and Moderate-Severe Disabilities Credentials.

The emphasis is on providing students with a wide range of practical methods for enhancing the lives of individuals with exceptional needs. To this end, coursework is taught by successful practitioners in the field. Also, the programs provide extensive supervised fieldwork in settings that are appropriate to each student's professional goals.

Additional Program Requirement:

To earn the Preliminary Education Specialist Credential in Mild-Moderate Disabilities all candidates must:

- (1) hold a valid Multiple Subject or Single Subject Teaching Credential, or
- (2) be enrolled in the joint Multiple Subject/Education Specialist (TED/SPED) program.

Credential Requirements (89-93 units)

Required Courses

- EPSY 5021 - Introduction to Educating all Students in Diverse Classrooms *Units: 4*
- EPSY 5125 - Educational Practices: Mild-Moderate Disabilities *Units: 4*
- EPSY 5126 - Special Education Law and Program Design *Units: 4*
- EPSY 6120 - Communication: Collaborative Teaming and Management *Units: 4*
- EPSY 6124 - Augmentative Communication and Assistive Technology *Units: 4*
- EPSY 6127 - Instruction and Behavioral Support: Mild-Moderate Disabilities *Units: 4*
- EPSY 6129 - Advanced Study in Collaborative Service Delivery, Education, and Transition *Units: 4*
- EPSY 6131 - Assessments: Students with Mild-Moderate Disabilities *Units: 4*
- EPSY 6133 - Curriculum: Students with Mild-Moderate Disabilities *Units: 4*
- EPSY 6134 - Advanced Curriculum and Instruction: Mild-Moderate Disabilities *Units: 4*
- EPSY 6141 - Social Networks and Communication for Students with Autism Spectrum Disorders (ASD) and Other Disabilities *Units: 4*
- EPSY 6143 - Positive Behavior Supports *Units: 4*
- EPSY 6206 - Advanced Studies in the Education of Students with Mild-Moderate Disabilities: Research and Professional Practice *Units: 4*
- EPSY 6670 - Field Work Group Supervision I *Units: 3*
- EPSY 6860 - Advanced Fieldwork I *Units: 2-4* (students in this program are required to take as a 4-unit course)
- EPSY 6862 - Advanced Fieldwork II *Units: 2-4* (students in this program are required to take as a 4-unit course)
- EPSY 6880 - Advanced Internship *Units: 2-15* (A maximum of 12 units are required for the credential: 4 units to be taken in Winter Quarter; 8 units to be taken in Spring Quarter)
- EPSY 6999 - Issues in Educational Psychology *Units: 2* (A maximum of 12 units are required for the credential; 2 units/quarter for 6 quarters)

Special Education Teacher Internship Program Mild-Moderate Disabilities Education Specialist Credentials

Complete the courses listed above for the Preliminary Mild-Moderate Disabilities Education Specialist Credential, in addition to:

- EPSY 6770 - Internship *Units: 2-6* (number of units depends on point-of-entry into internship) 2-6 units; may be repeated two times for credit, for a maximum of 18 units (special education candidates may take 6770 for a maximum of 8 units.)

The internship program will allow you to earn your Education Specialist credential while continuing to teach full-time.

Concurrent Multiple Subject and Education Specialist Credentials (Mild-Moderate and Moderate-Severe Preliminary) - TED/SPED

In this program, candidates earn both Multiple Subject and Educational Specialist Credentials (either Mild-Moderate or Moderate-Severe). The requirements for the Multiple Subject Credential are listed under "Standard Pathway" in the "Multiple or Single Subject Credential Programs" section of the Department of Teacher Education chapter in this Catalog. The requirements for the Preliminary Education Specialist Credentials are listed above. This is a two-year program, and the schedule of course offerings will vary with each entering cohort.

Preliminary Education Specialist Credential: Moderate-Severe Disabilities

Special Education Programs of Study

Faculty: Jacki L. Anderson (Coordinator, Moderate-Severe Disabilities), Ann T. Halvorsen, Linda Smetana (Coordinator, Mild-Moderate Disabilities)

The Special Education program prepares their graduates for careers in direct teaching and for leadership roles in Special Education. Programs are offered which lead to the Master of Science degree and/or to the Education Specialist: Mild-Moderate and Moderate-Severe Disabilities Credentials.

The emphasis is on providing students with a wide range of practical methods for enhancing the lives of individuals with exceptional needs. To this end, coursework is taught by successful practitioners in the field. Also, the programs provide extensive supervised fieldwork in settings that are appropriate to each student's professional goals.

Additional Program Requirement:

To earn the Preliminary Education Specialist Credential in Mild-Moderate Disabilities all candidates must:

- (1) hold a valid Multiple Subject or Single Subject Teaching Credential, or
- (2) be enrolled in the joint Multiple Subject/Education Specialist (TED/SPED) program.

Credential Requirements (85-89 units)

Required Courses

- EPSY 5021 - Introduction to Educating all Students in Diverse Classrooms *Units: 4*
- EPSY 5126 - Special Education Law and Program Design *Units: 4*
- EPSY 5136 - Educational Practices: Moderate-Severe Disabilities *Units: 4*
- EPSY 6120 - Communication: Collaborative Teaming and Management *Units: 4*
- EPSY 6124 - Augmentative Communication and Assistive Technology *Units: 4*
- EPSY 6129 - Advanced Study in Collaborative Service Delivery, Education, and Transition *Units: 4*
- EPSY 6137 - Instructional and Behavioral Support: Moderate-Severe Disabilities *Units: 4*
- EPSY 6140 - Curriculum: Students with Moderate-Severe Disabilities *Units: 4*
- EPSY 6141 - Social Networks and Communication for Students with Autism Spectrum Disorders (ASD) and Other Disabilities *Units: 4*
- EPSY 6142 - Assessment: Students with Moderate-Severe Disabilities *Units: 4*
- EPSY 6143 - Positive Behavior Supports *Units: 4*
- EPSY 6207 - Advanced Studies in the Education of Students with Moderate to Severe Disabilities: Research and Professional Practice *Units: 4*
- EPSY 6671 - Field Work Group Supervision II *Units: 3*
- EPSY 6860 - Advanced Fieldwork I *Units: 2-4* (students in this program are required to take as a 4-unit course)
- EPSY 6862 - Advanced Fieldwork II *Units: 2-4* (students in this program are required to take as a 4-unit course)
- EPSY 6880 - Advanced Internship *Units: 2-15* (12 units are required for the credential: 4 units to be taken in Winter Quarter; 8 units to be taken in Spring Quarter)
- EPSY 6999 - Issues in Educational Psychology *Units: 2* (12 units are required for the credential; 2 units/quarter for 6 quarters)

Special Education Teacher Internship Program Moderate-Severe Disabilities Education Specialist Credentials

Complete the courses listed above for the Preliminary Moderate-Severe Disabilities Education Specialist Credential, in addition to:

- EPSY 6770 - Internship *Units: 2-6* (number of units depends on point-of-entry into internship) 2-6 units; may be repeated two times for credit, for a maximum of 18 units (special education candidates may take 6770 for a maximum of 8 units.)

The internship program will allow you to earn your Education Specialist credential while beginning to teach part-time. You will be able to work up to 80% time in one of the area districts with which CSUEB has an approved Specialist Intern Program. In addition you will be placed as a student teacher under the supervision of a master teacher for required fieldwork across ages and with general and special education students.

Concurrent Multiple Subject and Education Specialist Credentials (Mild-Moderate and Moderate-Severe Preliminary) - TED/SPED

In this program, candidates earn both Multiple Subject and Educational Specialist Credentials (either Mild-Moderate or Moderate-Severe). The requirements for the Multiple Subject Credential are listed under "Standard Pathway" in the "Multiple or Single Subject Credential Programs" section of the Department of Teacher Education chapter in this Catalog. The requirements for the Preliminary Education Specialist Credentials are listed above. This is a two-year program, and the schedule of course offerings will vary with each entering cohort.

Professional Administrative Services (Tier II) Credential

School districts throughout the Bay Area are working with CSU, East Bay with the goal of developing leadership core within districts' teacher force and building capacity in our schools. Year 1 cohorts will be offered in a variety of locations starting Fall Quarter. With the course work offered within a district or at another geographically convenient location, this program provides multiple leadership development opportunities.

Cohorted Credential Programs

Note: Credential requirements specified in this catalog are subject to changes made by the State of California.

Candidates must complete BOTH the **Department** and the **University** application processes.

Contact:

Credential Student Service Center,

25800 Carlos Bee Blvd.,

Arts & Education Building, room 235,

Hayward, CA 94542

Credential Requirements (24 units)

This program is currently under review to comply with new CTC standards. Course list subject to change. Program is a 2 year program. You will take 2 classes per quarter. Classes meet 1 Saturday per month from 9am to 1pm.

- EDLD 6817 - Assessment, Mentoring, and Support Practicum I *Units: 3*
- EDLD 6818 - Assessment, Mentoring, and Support Practicum II *Units: 3*
- EDLD 6819 - Assessment, Mentoring, and Support Practicum III *Units: 3*
- EDLD 6831 - Assessment, Coaching and Support Practicum I *Units: 3*
- EDLD 6832 - Assessment, Coaching and Support Practicum II *Units: 3*
- EDLD 6833 - Assessment, Coaching and Support Practicum III *Units: 3*
- EDLD 6860 - Developing an Inquiring Community *Units: 1*
- EDLD 6865 - Focus on Learning *Units: 1*
- EDLD 6870 - Professional and Organizational Development *Units: 1*
- EDLD 6875 - Political Social Context in Education *Units: 1*
- EDLD 6880 - Ethics and Integrity *Units: 1*
- EDLD 6885 - Managing an Organization and Developing a Collaborative Culture *Units: 1*

Pupil Personnel Credential: School Counseling Specialization

Credential Requirements (90 units)

The Pupil Personnel Credential (School Counseling Specialization) is offered through the School Counseling, and Marriage, Family Therapy program. This credential is required for work as a counselor in the public schools, and is approved by the California Commission of Teacher Credentialing (CTC). The commission sets the standards and competencies for the state, and Cal State East Bay's program is designed to incorporate all knowledge, skills and practical experiences required to meet those expectations.

The School Counseling Credential program is a two-year course of study that reflects an integration of local program needs, the campus mission, and the direction provided by the National Standards and National Model of the American School Counselor Association (ASCA) and the National Career Development Guidelines (NOICC). The program is designed to train competent practitioners who are prepared to be leaders in building comprehensive, results-based school counseling programs that serve the needs of all pupils. The program provides training in mental health services using an integrated model designed to serve marriage and family therapists, school counseling and school psychology students. The school counseling students, however, will receive additional training and experience to prepare them to effectively perform the functions of a school counselor. The School Counseling Credential program includes specific training in guidance program models, guidance program development/implementation, and in the comprehensive and developmental school guidance curricula for academic, career, and personal/social development. Students also learn team building, management, and accountability for a comprehensive guidance program.

The M.S. in Counseling (or an acceptable equivalent) is required.

I. Prerequisites (9 units)

The prerequisites are the same as for the M.S. in Counseling. (Prerequisites are not included in the 90 units required for the Pupil Personnel Credential.) Coursework as follows:

- Statistics *Units: 3*
- Abnormal psychology *Units: 3*
- Learning *Units: 3*, or
- Personality *Units: 3*, or
- Human, child, or adolescent development *Units: 3*

II. Course Requirements (64 units)

- EPSY 5610 - Microcounseling I *Units: 2*
- EPSY 6023 - Research in Applied Behavioral Sciences *Units: 4*
- EPSY 6025 - Psychopathology of Childhood *Units: 4*
- EPSY 6302 - Individual Development *Units: 4*
- EPSY 6400 - Family Psychotherapy *Units: 4*
- EPSY 6403 - Psychotherapy for Children *Units: 4*
- EPSY 6500 - Cognitive Behavior Therapy *Units: 4*
- EPSY 6669 - Seminar in Mental Health Consultation *Units: 3*
- EPSY 6701 - Appraisal Procedures: Standardized *Units: 4*
- EPSY 6750 - Foundations of Counseling *Units: 4*
- EPSY 6752 - Cross-Cultural Counseling *Units: 4*
- EPSY 6762 - Group Procedures and Facilitation *Units: 4*
- EPSY 6764 - Intervention Strategies for Systems and Organizational Change *Units: 4*
- EPSY 6765 - Psychological and Counseling Services in Schools and Higher Education *Units: 2*
- EPSY 6766 - Personal/Social Counseling in Schools *Units: 2*
- EPSY 6767 - Academic Counseling in Schools *Units: 3*
- EPSY 6768 - Foundations of School Counseling *Units: 4*
- EPSY 6785 - Law and Ethics in Counseling *Units: 3*
- EPSY 6786 - Child Abuse Assessment *Units: 1*

III. Fieldwork (minimum 18 units)

- EPSY 6600 - Clinic Rounds *Units: 3 (1)* (must take a minimum of 3 units. May be repeated seven times for credit for a maximum of 8 units)
- EPSY 6670 - Field Work Group Supervision I *Units: 3*
- EPSY 6671 - Field Work Group Supervision II *Units: 3*
- EPSY 6672 - Field Work Group Supervision III *Units: 3*
- EPSY 6770 - Internship *Units: 2-6* (may be taken multiple quarters)

IV. Capstone Experience (4 units)

Complete both A and B

- A. EPSY 6205 - Advanced Pupil Personnel Specialist *Units: 4*
- B. Passing score on Comprehensive Exam in School Counseling *Units: 3*

Note:

- California Commission of Teacher Credentialing (CCTC) approval of revised program documents for new Standards and Competencies pending.

Pupil Personnel Credential: School Psychology Internship and School Psychology Specialization

Credential Requirements

This combined credential program is offered by the Clinical Child/School Psychology faculty.

The school psychologist is a clinical child psychologist who functions within the school organization. The school psychologist provides consultation and services for enhancement of the cognitive, social and emotional development of children and adolescents within the school environment; provides programs for the development of the staff; has responsibility for the prevention, assessment, and remediation of the behavioral and learning difficulties of children; and often becomes the primary resource for the emotionally troubled children and their parents. The school psychologist serves the schools as the expert in psycho-educational measurement, program evaluation, and research.

School Psychology Internship (95 units)

This program prepares students to undertake a full-time (1200-hour) Internship in School Psychology, as required by the National Association of School Psychologists and, as of July, 1996, by the Commission on Teacher Credentialing of the State of California. (Note that the Internship Credential would serve to qualify a student for internship status, and thus would have to be earned prior to the actual internship year itself.)

Prerequisites are not included in the 95 units required for the School Psychology Internship Program. Prerequisite units are minimum values; all Cal State East Bay courses have more units.

I. Prerequisites (18 units)

- An Introduction to Statistics (e.g., STAT 1000) *Units: 3*
- Abnormal Psychology (e.g., PSYC 4410) *Units: 3*
- Developmental Psychology (e.g., PSYC 4420) *Units: 3*
- Learning Theory (e.g., PSYC 4210) *Units: 3*
- Personality Theory (e.g., PSYC 4610) *Units: 3*
- Psychological Tests and Measurements (e.g., PSYC 3200) *Units: 3*

II. Required Courses (77 units)

- EPSY 5610 - Microcounseling I *Units: 2*
- EPSY 6023 - Research in Applied Behavioral Sciences *Units: 4*
- EPSY 6025 - Psychopathology of Childhood *Units: 4*
- EPSY 6301 - Pediatric Psychology *Units: 4*
- EPSY 6302 - Individual Development *Units: 4*
- EPSY 6400 - Family Psychotherapy *Units: 4*
- EPSY 6403 - Psychotherapy for Children *Units: 4*
- EPSY 6500 - Cognitive Behavior Therapy *Units: 4*
- EPSY 6610 - Graduate Seminar I *Units: 2*
- EPSY 6620 - Graduate Seminar II *Units: 2*
- EPSY 6630 - Graduate Seminar III *Units: 2*
- EPSY 6669 - Seminar in Mental Health Consultation *Units: 3*

- EPSY 6720 - Theory and Assessment of Cognition *Units: 4*
- EPSY 6746 - Neuropsychology of Learning Disabilities *Units: 4*
- EPSY 6752 - Cross-Cultural Counseling *Units: 4*
- EPSY 6762 - Group Procedures and Facilitation *Units: 4*
- EPSY 6765 - Psychological and Counseling Services in Schools and Higher Education *Units: 2*
- EPSY 6785 - Law and Ethics in Counseling *Units: 3*
- EPSY 6810 - Advanced Graduate Seminar I *Units: 2*
- EPSY 6820 - Advanced Graduate Seminar II *Units: 2*
- EPSY 6830 - Advanced Graduate Seminar III *Units: 2*
- EPSY 6911 - Developmental Assessment Practicum *Units: 4*
- EPSY 6912 - Personality Assessment *Units: 4*
- 3 units of graduate level coursework covering the topic of Program Evaluation, with consent of department

III. Required Fieldwork (18 units)

- EPSY 6670 - Field Work Group Supervision I *Units: 3*
- EPSY 6671 - Field Work Group Supervision II *Units: 3*
- EPSY 6672 - Field Work Group Supervision III *Units: 3*
- EPSY 6870 - Advanced Field Work Group Supervision I *Units: 3*
- EPSY 6871 - Advanced Field Work Group Supervision II *Units: 3*
- EPSY 6872 - Advanced Field Work Group Supervision III *Units: 3*

School Psychology Specialization (144 units)

This program includes the 95 units required for the School Psychology Internship specialization described in the previous section (77 units of required courses; 18 units of required fieldwork). In addition students must complete the following:

Required Fieldwork (45 units)

- EPSY 6880 - Advanced Internship *Units: 2-15* (taken three times, 15 units each)

Required Capstone Experience (4 units)

Complete both A and B

- A. EPSY 6205 - Advanced Pupil Personnel Specialist *Units: 4*
- B. Passing score on Praxis II exam, National Examination for School Psychology Certification

Single Subject Credential

Basic Teaching Credential Programs

Credential requirements specified in this catalog are subject to changes made by the State of California. Contact the Department of Teacher Education for current regulations.

Admission

Note: Department application deadlines differ from those listed by the university. Please contact the department for appropriate program application periods.

Multiple or Single Subject Credential Programs

Before applying to the Multiple Subject or Single Subject Credential Programs, all applicants must attend an "Admission Advisement Session." Two to three sessions are held every month, except July and August. For a schedule of sessions, call (510) 885-2272.

Multiple Subject applicants (except for the undergraduate blended program; see the Liberal Studies chapter of this catalog) must file with the Department of Teacher Education:

- a completed University "Graduate and Post-Baccalaureate Application"
- a graduate application fee
- a statement of residency, if new to Cal State East Bay
- two official copies of each transcript from each college or university attended (and one additional copy or photocopy for the Department of Teacher Education)
- a Department Application Form for the Multiple Subject Credential Program
- two letters of recommendation verifying prerequisite field experience.

Single Subject applicants must file with the Department of Teacher Education:

- a completed University "Graduate and Post-Baccalaureate Application"
- a graduate application fee
- a statement of residency if new to Cal State East Bay
- two official copies of each transcript (and one additional copy or photocopy for the Department of Teacher Education)
- a Department Application Form for the Single Subject Credential Program
- two letters of recommendation verifying prerequisite field experience.
- Applicants to the Bachelors Plus Pathway will have separate application procedures and requirements. Please consult the Department of Teacher Education for details.

Prerequisites

Each candidate must complete the following prerequisites before entering the Multiple Subject and Single Subject Teaching Credential Programs:

- Subject Matter Competency. Multiple Subject applicants must pass the California Subject Examinations for Teachers (CSET) Multiple Subjects examinations. Single Subject applicants must either (a) complete a CCTC-approved subject matter preparation program or (b) pass the relevant CSET examinations.
- U.S. Constitution course or exam
- CBEST. California Basic Educational Skills Test, passing score
- All candidates must have a cumulative GPA of 2.67 with a GPA of 2.75 in the last 60 semester units.
- Two letters of recommendation verifying successful experiences in school/school-like settings. TED 3001, Exploring Education, may be taken as part of this requirement.

Admission Process

Applicants are required to attend an admission interview. Successful applicants are notified by mail shortly after the interview.

Applicants accepted into a credential program must immediately:

- file State Forms 41-CIC (Application for Character and Identification Clearance) and BID-7 (2-82) (two fingerprint cards), and submit a TB clearance dated within the past calendar year. A non-refundable partial fee (money order or certified check made payable to Commission on Teacher Credentialing) must accompany Form 41-4. Upon completion of the program, applicants must pay the remaining credential application fee. (Contact the Credentials Office, AE 250, 510/885-2272.) or
- file a copy of a previous/current California credential and a TB clearance dated within one calendar year of application.

Credential Requirements

The Single Subject Credential is the basic credential that authorizes teaching in one area of the curriculum. This credential is required for almost all high school and middle school positions, and for a few elementary "specialist" positions. The credential is offered in the following areas: art, English, mathematics, music, physical education, science, and social studies.

Curricular Requirements (64 units)

The Single Subject Credential Program has two "pathways," or sets of course requirements: (1) Bachelors Plus, and (2) Discrete Course. The Discrete Course Pathway is four quarters with summer entry. The Bachelors Plus Pathway is an alternative for students who want to start the Single Subject Credential Program as undergraduates and this pathway takes eight quarters to complete.

The courses required are listed below:

A. Both Pathways (43 units)

- TED 5110 - Computer-Based Technology in the Classroom I *Units: 3*
- TED 5211 - TPA Subject-Specific Pedagogy Task I Assessment *Units: 1*
- TED 5212 - TPA Designing Instruction Task II Assessment *Units: 1*
- TED 5213 - TPA Assessing Learning Task III Assessment *Units: 1*
- TED 5214 - TPA Culminating Teaching Experience Task IV Assessment *Units: 1*
- TED 5301 - Psychological Foundations in Middle and Secondary School Education *Units: 4*
- TED 5305 - Social/Cultural Context of Education *Units: 3*
- TED 5311 - Classroom Environment *Units: 2*
- TED 5314 - Teaching Special Populations in Regular Classrooms *Units: 3*
- TED 5318 - Professional Responsibilities *Units: 3*
- TED 5320 - Content Literacy *Units: 3*
- TED 5326 - Preparation to Teach English Learners in the Single Subject Classroom *Units: 3*
- TED 5372 - Team Seminar I: Orientation to TPA Subject-Specific Pedagogy Task I and Reflection on Field Practice *Units: 1*
- TED 5373 - Team Seminar II: Orientation to TPA Designing Instruction Task II and Reflection on Field Practice *Units: 1*
- TED 5374 - Team Seminar III: Orientation to TPA Assessing Learning Task III and Reflection on Field Practice *Units: 1*
- TED 5375 - Team Seminar IV: Orientation to TPA Culminating Teaching Experience Task IV and Reflection on Field Practice *Units: 1*
- TED 5380 - Health and Safety in the Secondary School *Units: 2*
- TED 5390 - Instructional Methods for the Single Subject Classroom I *Units: 3*
- TED 5391 - Instructional Methods for the Single Subject Classroom II: Focus on Differentiated Instruction *Units: 2*
- TED 5392 - Instructional Methods for the Single Subject Classroom III: Focus on Literacy *Units: 2*
- TED 5393 - Instructional Methods for the Single Subject Classroom IV: Focus on Equity *Units: 2*

B. Bachelors Plus Pathway (21 units)

For further details refer to the Programs of Study Chapter under Bachelors Plus: Early Pathway Liberal Studies/Credential Program (BPEP).

- TED 3007 - Intermediate Field Experience in the Secondary School A *Units: 1*
- TED 3008 - Intermediate Field Experience in the Secondary School B *Units: 1*
- TED 5443 - Student Teaching A in Bachelors Plus Program *Units: 4*
- TED 5444 - Student Teaching B in Bachelors Plus Program *Units: 4*
- TED 5445 - Student Teaching C in Bachelors Plus Program *Units: 9*

C. Discrete Course Pathway (21 units)

- TED 5381 - Field Experience in the Single Subject Classroom A *Units: 7*
- TED 5382 - Field Experience in the Single Subject Classroom B *Units: 7*
- TED 5383 - Field Experience in the Single Subject Classroom C *Units: 7*

Field experience requirements:

All candidates will complete two supervised field experiences, either as a student teacher or an intern. Field assignments begin in September with the beginning of the K-12 school year and continue, with breaks at different times, until June.

Candidates in the Bachelors Plus Pathway have a required junior year field placement and complete their two supervised field experiences as seniors.

Teaching Performance Assessment (TPA) Tutorials: Any candidate who fails a TPA task must enroll in the appropriate TPA Tutorial course(s):

- TED 5061 - TPA Subject-Specific Pedagogy Task I Tutorial *Units: 2*
- TED 5062 - TPA Designing Instruction Task II Tutorial *Units: 2*
- TED 5063 - TPA Culminating Teaching Experience Task III Tutorial *Units: 2*
- TED 5064 - TPA Culminating Teaching Experience Task IV Tutorial *Units: 2*

Speech-Language Pathology Services Credential

The Department of Communicative Sciences and Disorders has developed a program of graduate study designed to fulfill the requirements for the Speech-Language Pathology Services Credential. This credential is required for employment in California's public schools.

Individuals wishing to obtain this credential must meet all requirements of the Speech-Language Pathology M.S. degree outlined below that includes an internship in the public schools (SPPA 6066), an additional 4-unit course in Educational Psychology (EPSY 5021) and fulfillment of California's Basic Skills Requirement.

Speech-Language Pathology, M.S.

Program Description

The Master of Science degree in Speech-Language Pathology is offered in the Department of Communicative Sciences and Disorders. The objective of this program is the professional preparation of each student, academically and clinically, for state licensure, clinical certification by the American Speech-Language-Hearing Association, and the credential as a public school Speech, Language and Hearing Specialist.

Speech-language pathology and audiology are the professions which help adults and children overcome disabilities of speech, language and hearing.

This program has developed a reputation for rigorous and balanced professional training. The master's degree program is accredited by the American Speech-Language-Hearing Association.

Student Learning Outcomes

Students graduating with an M.S. in Speech-Language Pathology will be able to:

- Screen, assess and treat individuals with a variety of communicative disorders across the lifespan;
- Communicate and collaborate effectively with clients, families, and other professionals;
- Evaluate and apply clinical research, recognizing the need for evidence to support best practices in clinical service delivery;
- Consistently apply ethical professional standards, recognize and respect the limits of their professional preparation and clinical skills, and work effectively with other professionals;
- Demonstrate cultural competence and commitment to advocacy for persons with communicative disorders.

Career Opportunities

Students who complete the Master of Science degree in Speech-Language Pathology are eligible for ASHA certification, California state licensure, and in most cases the Speech-Language Pathology Services Credential. Speech-language pathologists work in a variety of settings including hospitals, schools, rehabilitation centers, community speech and hearing clinics, public schools, and private practice.

Special Features

Clinical experiences are a key component in preparing students for licensure. The department operates the Speech, Language and Hearing Clinic, an on-campus facility that provides clinical services to speech, language, and hearing impaired individuals from Bay Area communities. Students who are enrolled in the Speech-Language Pathology master's program are able to observe, receive training, and do research in this fully-equipped facility. Additional clinical training is received in off-site placements and internships in settings that meet each student's interests and training requirements including hospitals, rehabilitation facilities, schools, and clinics. In order to acquire the knowledge and skills requisite to the practice of speech-language pathology, including the ability to function in a broad variety of clinical situations and to render a wide spectrum of client care, students must demonstrate skills and attributes in five skill areas: academic performance, written language, oral communication, hearing, and

interpersonal management. Prior to entering clinic, students will pass an essential functions evaluation of skills necessary to be an effective clinician. The evaluation will include a screening of students' speech, oral-written language, and hearing.

Scholarships

- The most usual form of financial aid is in the form of guaranteed student loans. However, other types of financial aid are available. The university supports the following programs:
- State University Grant
- Federal Perkins Loan
- Federal Stafford Loan (including unsubsidized)
- Federal Work-Study
- Federal Supplemental Loans for Students
- Cal State East Bay Scholarships
- The Department of Communicative Sciences and Disorders recommends the award of certain forms of financial aid within the University. They include the following:
- *Betty Lindeman and Robert N. Rosenthal Memorial Fund*, non-interest loans, \$500 - \$1500 for graduate students in Communicative Sciences and Disorders.
- *Excellence in Aphasia Group Treatment Award*, \$3500 scholarship for a graduate student in Communicative Sciences and Disorders
- *Stephanie Amore Memorial Fund*, endowment earnings benefit students in the department
- *Stephanie Kalman Foundation Scholarships*, \$2,000-\$3000 scholarships for undergraduate and graduate students in Communicative Sciences and Disorders
- The department also maintains information on scholarships and grants from additional university and professional sources.
- Occasionally, funds are available for Graduate Equity Fellowships, Research and Teaching Assistantships, and Student Assistantships (clerical).

Admission

- A candidate must be admitted to the university, consistent with requirements and procedures explained in this catalog. Interested candidates apply for admission to the department and to the university at the same time. Applications for admission to the department are online at the department website (<http://www.csueastbay.edu/commsci>).

There are three categories of student status while pursuing the degree: "Conditionally Classified Graduate", "Classified Graduate", and "Advancement to Candidacy."

"Conditionally Classified" Status

Students are in "Conditionally Classified" status when they have been admitted to the M.S. in Speech-Language Pathology degree program, but have not yet completed the requirements for "Classified Graduate" status. Students whose undergraduate degree is not in the field of speech pathology should apply under this status.

"Classified Graduate" Status

Students are in "Classified Graduate" status when they:

- have been admitted to the M.S. in Speech-Language Pathology degree program;
- possess a baccalaureate degree from an accredited college or university with a major in Speech Pathology and Audiology or the equivalent coursework in Speech Pathology and Audiology with another degree. Preparatory coursework completed at other institutions must correspond in scope and content with required and elective courses offered on this campus;
- complete SPPA 4852, 4854, 4859, 4861, 4862, 4865, 4866 and 4867 or the equivalent;
- possess an overall grade point average of 3.0 or better covering the last 90 quarter units of course work;
- present evidence of having satisfactorily completed a minimum of 60 clock hours of supervised clinical practica in speech, language, and hearing;
- fulfill the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Advancement to Candidacy

Students reach "Advancement to Candidacy" status if they:

- are a "Classified Graduate" student in good standing;
- complete at least 12 units in graduate work in Speech Pathology and Audiology with a GPA of at least 3.0;

- complete a minimum of 2 units of SPPA 6056 and/or SPPA 6156 with a grade of "B" or better;
- defend satisfactorily his or her thesis proposal, if a thesis capstone is selected; and
- show evidence of progress and ability to complete the program by receiving at least a 3.0 GPA in each course taken.

Degree Requirements (74-78 units)

The program leading to the **M.S. degree in Speech-Language Pathology** requires completion of at least **74 quarter units** of credit with grades of "B" (3.0) or better from the courses listed below.

The **Speech-Language Pathology Services Credential track** requires the completion of the MS degree plus additional units and requirements for **78 quarter units** (see "Credentials" listed in the Programs of Study chapter in the catalog).

The work must be completed within five calendar years after admission to the program. At least 63 units must be completed in residence.

Core Required Courses (68 units)

- SPPA 6000 - Research Methods in Communicative Sciences and Disorders *Units: 4*
- SPPA 6010 - Advanced Speech and Hearing Science *Units: 2*
- SPPA 6020 - Vocal Pathology and Rehabilitation *Units: 4*
- SPPA 6030 - Clinical Organization and Management *Units: 2*
- SPPA 6040 - Advanced Seminar in Speech, Language and Communication Disorders *Units: 2*
- SPPA 6050 - Neurogenic Motor Speech Disorders: Adults and Children *Units: 4*
- SPPA 6055 - Aphasia and Related Neurogenic Language Disorders *Units: 4*
- SPPA 6056 - Practicum in Speech-Language Pathology: Treatment *Units: 2*
- SPPA 6057 - Practicum in Speech-Language Pathology: Assessment *Units: 2*
- SPPA 6060 - Advanced Study of Language Disorders in Children *Units: 4*
- SPPA 6064 - Fluency Disorders *Units: 4*
- SPPA 6066 - Clinical Internship in Speech-Language Pathology *Units: 6*
- SPPA 6070 - Augmentative/Alternative Communication-Assistive Technology for Speech-Language Pathologists *Units: 4*
- SPPA 6080 - Counseling Individuals with Speech, Language and Hearing Disorders *Units: 4*
- SPPA 6156 - Practicum in Audiologic Assessment *Units: 2*
- SPPA 6160 - Audiological Rehabilitation *Units: 4*
- SPPA 6220 - Dysphagia in Adults and Children *Units: 4*

Core Electives (4-6 units)

Students completing a 2-unit University Thesis for their Capstone Experience need only take a minimum of 4 elective units.

Students must select a minimum of 4-6 units from the following list of approved SPPA elective courses. Course substitutions may be made only with the approval of a graduate faculty advisor. Students may need to enroll in more than 4 or 6 units of electives to prepare for professional certification, licensure or credential.

- SPPA 6224 - Issues in Ethics *Units: 2*
- SPPA 6228 - School-based Issues in Speech-Language Pathology *Units: 2*
- SPPA 6229 - Medical Speech-Language Pathology *Units: 2*

Core Capstone Experiences (0-2 units)

Satisfactory achievement on a written or oral comprehensive examination, the format of which will be determined by the department (0-units), **OR** SPPA 6910 University Thesis *Units: 2*, including an oral examination.

The student need not have taken all required and elective courses for the major prior to completing the capstone experience; however, information contained in those courses may be included in the capstone experience.

Credential Requirements (4 units)

The Speech-Language Pathology Services Credential track prepares a student to apply for California's Speech-Language Pathology Services Credential and requires the completion of the M.S. degree outlined above and the following:

Required for Speech-Language Pathology Services Credential:

- Internship in the public schools (included in the M.S. degree: SPPA 6066)
- Fulfillment of California's Basic Skills Requirement

and

- EPSY 5021 - Introduction to Educating all Students in Diverse Classrooms *Units: 4*

Other Degree Requirements

In addition to departmental requirements, every student must also satisfy the university requirements for graduation which are described in the Graduate Degree Information chapter in this catalog. These include the 32-unit residence requirement, the five year rule on currency of subject matter, the minimum number of units of 6000-level courses, the 3.00 grade point average, and the University Writing Skills Requirement. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

Bachelor/Credential

Bachelors Plus: Early Pathway Liberal Studies/Credential Program (BPEP)

The BPEP Liberal Studies/Credential Program combines, with minor changes, two outstanding programs on the Hayward and Concord campuses designed for future elementary school teachers: the Liberal Studies B.A. major and the Multiple Subject Credential Program in Teacher Education. The BPEP Program meets the requirements set by the California Commission on Teacher Credentialing for subject matter and professional preparation. A student who completes this program will be granted a B.A. degree major in Liberal Studies and, upon passage of the CSET Multiple Subject Examination and RICA examination, a Level I (Preliminary) Multiple Subject teaching credential.

The BPEP Program is an alternative to the traditional sequence of four years of undergraduate work and one year of post-baccalaureate work in the Teacher Education Department. That degree/credential path continues to exist and is chosen by most of our students. The BPEP Program is an intensive, accelerated program that combines subject matter coursework with training in educational methods and experience in the elementary school classroom.

The BPEP Program is a full-time commitment for two years including the intervening summer between the junior and senior years. During those years, students are required to take 16 to 22 units a quarter. As a result of this concentrated work-load, most students find it difficult to hold down a job during their time in the program. Final admission requirements for the Credential Program must be completed during the junior year. During the senior year, students are members of a Multiple Subject Credential Team. Members of the Team take their courses together and finish together. Thus, students are unable to move through the program at their own pace.

Admission

Students must declare Liberal Studies as their major and then contact the Liberal Studies office to apply for admission to the BPEP Program. Admission is a two stage process: (1) provisional admission during the summer prior to the student's junior year, and (2) final admission at the end of the junior year.

Provisional admission requirements are: a minimum GPA of 2.90; completion of TED 3001 or an equivalent course which requires a minimum of 20 hours of field experience in an elementary school classroom; and three letters of recommendation, including one from a teacher or principal verifying experience in a K-6 classroom. (One letter may be from the instructor in TED 3001 or equivalent course.) Final admission requirements are: passage of the CBEST examination; completion of 80% of the Liberal Studies major; a minimum GPA of 2.90 in coursework taken during the junior year; and an admission interview by the Multiple Subject Credential Team Leader.

Please contact the Liberal Studies office for information concerning admission forms, admission deadlines, and for the specific courses required during the junior and senior years.

Single Subject Preparation

Foundational-level Mathematics, Single Subject Matter Preparation

Mathematics

The Department of Mathematics offers two preparation programs for future mathematics teachers; the Single Subject Matter Program in Mathematics and the Subject Matter Program in Foundational-level Mathematics. Undergraduate students interested in teaching mathematics at the middle or high school level are strongly encouraged to complete the Single Subject Matter Program in Mathematics. Completion of the Single Subject Matter Program in Mathematics establishes subject matter competency in mathematics for future teachers to teach all mathematics at the K-12 level. Completion of the Subject Matter Program in Foundational-level Mathematics establishes subject matter competency in mathematics for future teachers to teach mathematics at the middle school level and for some mathematics courses at the high school level.

Single Subject Matter Preparation Program in Foundational-level Mathematics

Completion of the Subject Matter Preparation Program in Foundational-level Mathematics is certified by the Department of Mathematics and Computer Science. In addition to the required mathematics courses, a year of education courses and practice teaching is required before the California Secondary Teaching Credential in Foundational-level Mathematics can be granted. Forty-eight quarter units are required in the Subject Matter Preparation Program in Foundational-level Mathematics. Current holders of a California Multiple Subjects Credential or Single Subject Credential in a field other than mathematics will also need to complete additional Teacher Education courses to add an authorization in Foundational-level Mathematics. For additional information, contact the Department of Mathematics and Computer Science: North Science 337; 510-885-4011; e-mail: mathcs@csueastbay.edu; website: <http://www20.csueastbay.edu/csci/departments/math-cs/index.html>.

Core Mathematics Courses (32 quarter units)

- MATH 1130 - College Algebra *Units: 4*
- MATH 1300 - Trigonometry and Analytic Geometry *Units: 4*
- MATH 1810 - Mathematics for Business and Social Sciences *Units: 4*
- MATH 2011 - Number Systems *Units: 4*
- MATH 4012 - Geometry and Measurement *Units: 4*
- MATH 4013 - Statistics, Data Analysis, and Probability *Units: 4*
- MATH 4014 - Algebra and Functions *Units: 4*
- MATH 4030 - Advanced Study of School Mathematics *Units: 4*

Extended Study of Mathematics-based or Affiliated Courses (16 quarter units)

Additional courses not used above chosen from the following list or from other related courses approved by the Mathematics Subject Matter Preparation Program Adviser.

- CHEM 1100 - Introduction to College Chemistry *Units: 5*
- CS 1080 - Introduction to Media Computation *Units: 4*
- CS 1160 - Introduction to Computer Science I *Units: 4*
- ENGR 1011 - Engineering: An Introduction *Units: 3*
- MATH 1304 - Calculus I *Units: 4*
- MATH 1305 - Calculus II *Units: 4*
- MATH 2150 - Discrete Structures *Units: 4*
- MATH 3000 - Introduction to Abstract Mathematics and Proofs *Units: 4*
- MATH 4040 - History of Mathematics *Units: 4*
- MGMT 3100 - Decision Science *Units: 4*
- PHIL 1001 - Introduction to Logic *Units: 4*
- PHIL 3002 - Modern Logic *Units: 4*
- PHYS 1700 - Elementary Physics *Units: 4*
- PHYS 1800 - Astronomy *Units: 4*
- STAT 1000 - Elements of Probability and Statistics *Units: 5*

Mathematics, Single Subject Matter Preparation

Mathematics

The Department of Mathematics offers two preparation programs for future mathematics teachers; the Single Subject Matter Program in Mathematics and the Subject Matter Program in Foundational-level Mathematics. Undergraduate students interested in teaching mathematics at the middle or high school level are strongly encouraged to complete the Single Subject Matter Program in Mathematics. Completion of the Single Subject Matter Program in Mathematics establishes subject matter competency in mathematics for future teachers to teach all mathematics at the K-12 level. Completion of the Subject Matter Program in Foundational-level Mathematics establishes subject matter competency in mathematics for future teachers to teach mathematics at the middle school level and for some mathematics courses at the high school level.

Single Subject Matter Preparation Program in Mathematics

Completion of the Single Subject Matter Preparation Program in Mathematics is certified by the Department of Mathematics and Computer Science. A student need not be a mathematics major to complete this program; however, students who complete the mathematics major with Option C (Mathematics Teaching) should find it relatively easy to meet the requirements of the program, as noted in the description of Option C requirements in the undergraduate Mathematics chapter. In addition to the required mathematics courses, a year of education courses and practice teaching is required before the California Secondary Teaching Credential in Mathematics can be granted. Seventy-one quarter units are required in the Single Subject Matter Preparation Program in Mathematics. For additional information, contact the Department of Mathematics and Computer Science: North Science 337; 510-885-4011; e-mail: mathcs@csueastbay.edu; website: <http://www20.csueastbay.edu/csci/departments/math-cs/index.html>.

I. Core Mathematics (48 units)

- MATH 1130 - College Algebra *Units: 4*
- MATH 1300 - Trigonometry and Analytic Geometry *Units: 4*
- MATH 1304 - Calculus I *Units: 4*
- MATH 1305 - Calculus II *Units: 4*
- MATH 2101 - Elements of Linear Algebra *Units: 4*
- MATH 2304 - Calculus III *Units: 4*
- MATH 3121 - Abstract Algebra I *Units: 4*
- MATH 3215 - Geometry I *Units: 4*
- MATH 3600 - Number Theory *Units: 4*
- MATH 4040 - History of Mathematics *Units: 4*
- MATH 4901 - Senior Seminar *Units: 4*
- STAT 3401 - Introduction to Probability Theory I *Units: 4*

II. Coursework Providing Breadth and Perspective (23 units)

Mathematics courses (12 quarter units):

- MATH 3000 - Introduction to Abstract Mathematics and Proofs *Units: 4*
- MATH 3300 - Analysis I *Units: 4*
- MATH 3331 - Differential Equations *Units: 4*

Statistics course (4 quarter units)

- STAT 3502 - Statistical Inference I *Units: 4*

Computer Science or discrete structures course (4 quarter units):

- CS 1160 - Introduction to Computer Science I *Units: 4*
- or*
- MATH 2150 - Discrete Structures *Units: 4*

Field Experience (0-3 quarter units):

- TED 3001 - Exploring Education *Units: 3*

Note:

And/or other field experience approved by the Mathematics Subject Matter Preparation Adviser: At least 45 hours of classroom experience in an instructional capacity is required.

Electives (0-3 quarter units):

Additional courses not used above to bring the total Breadth and Perspective units to at least 23, chosen from the following list or from other related courses approved by the Mathematics Subject Matter Preparation Adviser:

- CHEM 1101 - General Chemistry *Units: 5*
- CHEM 1102 - General Chemistry *Units: 5*
- CHEM 1103 - General Chemistry *Units: 5*
- CS 1160 - Introduction to Computer Science I *Units: 4*
- CS 2360 - Introduction to Computer Science II *Units: 4*
- CS 2430 - Computer Organization and Assembly Language Programming *Units: 4*
- ECON 2301 - Principles of Microeconomics *Units: 4*
- ECON 2302 - Principles of Macroeconomics *Units: 4*
- MATH 3100 - Linear Algebra *Units: 4*
- MATH 3122 - Abstract Algebra II *Units: 4*
- MATH 3301 - Analysis II *Units: 4*
- MATH 4215 - Topics in Geometry *Units: 4*
- MGMT 3100 - Decision Science *Units: 4*
- PHIL 1001 - Introduction to Logic *Units: 4*
- PHIL 3002 - Modern Logic *Units: 4*
- PHYS 1001 - General Physics: Newtonian Mechanics and Oscillations *Units: 5*
- PHYS 1002 - General Physics: Thermodynamics and Optics *Units: 5*
- PHYS 1003 - General Physics: Electromagnetism *Units: 5*

Music, Single Subject Matter Preparation Program

Completion of the Single Subject Matter Preparation Program in Music is certified by the Department of Music. The Single Subject Matter Preparation Program in Music requires 39 units. For additional information, contact the Department of Music: Music and Business Bldg. 2571; 510-885-3135; website: <http://www20.csueastbay.edu/class/departments/music/index.html>.

Required Courses (39 units)

- MUS 2321 - Basic Voice *Units: 1*
- MUS 2331 - Basic Orchestral Instruments: Violin and Viola *Units: 1*
- MUS 2332 - Basic Orchestral Instruments: Cello and Bass *Units: 1*
- MUS 2341 - Basic Orchestral Instruments: Clarinet *Units: 1*
- MUS 2342 - Basic Orchestral Instruments: Double Reeds *Units: 1*
- MUS 2343 - Basic Orchestral Instruments: Flute and Saxophone *Units: 1*
- MUS 2355 - Basic Orchestral Instruments: Basic Brass *Units: 1*
- MUS 2361 - Basic Orchestral Instruments: Percussion *Units: 1*
- MUS 2371 - Basic Guitar *Units: 1*
- MUS 2410 - Foundations of Music Education *Units: 4*
- MUS 3014 - Introduction to World Music and Culture *Units: 4*
- MUS 3095 - Music Technology for Educators *Units: 3*
- MUS 3370 - Basic Conducting *Units: 3*
- MUS 3380 - Choral Conducting *Units: 3*
- MUS 3390 - Instrumental Conducting *Units: 3*
- MUS 4435 - Seminar in Public School Instrumental Teaching Techniques *Units: 3*

- MUS 4440 - Seminar in Public School Choral Teaching Techniques *Units: 3*
- MUS 4445 - Seminar in Elementary Classroom Music Teaching Techniques *Units: 3*
- MUS 4900 - Independent Study *Units: 1-4*

Physical Education, Single Subject Matter Preparation

Completion of the Single Subject Matter Preparation Program in Physical Education is certified by the Department of Kinesiology. The Single Subject Matter Preparation Program in Physical Education requires 98-102 units. For additional information, contact the Department of Kinesiology: Physical Education Bldg. 130; 510-885-3061; website: www20.csueastbay.edu/ceas/departments/kin/index.html.

Required Courses (98-102 units)

- BIOL 2010 - Human Physiology and Anatomy I *Units: 5*
- or
- BIOL 2011 - Anatomy and Physiology I *Units: 5*
- DANC 3235 - Dance for Children *Units: 4*
- KIN 1610 - Introduction to Kinesiology *Units: 4*
- KIN 2650 - CPR and First Aid *Units: 2*
- KIN 3072 - Individual and Dual Sports *Units: 3*
- KIN 3075 - Aquatics and Outdoor Education *Units: 3*
- KIN 3079 - Combatives and Fitness Activities *Units: 3*
- KIN 3080 - Team Sports and Field Sports *Units: 3*
- KIN 3300 - Critical Inquiry in Kinesiology *Units: 5*
- KIN 3305 - Structural Kinesiology *Units: 4*
- KIN 3310 - Biomechanics *Units: 5*
- KIN 3320 - Exercise Physiology *Units: 5*
- KIN 3330 - Motor Learning and Control *Units: 5*
- KIN 3340 - Motor Development *Units: 4*
- KIN 3350 - Sport and Exercise Psychology *Units: 5*
- KIN 3700 - History of Sport and Physical Education *Units: 4*
- KIN 3740 - Philosophical Foundations of Kinesiology *Units: 4*
- KIN 3750 - Sport in Contemporary Society *Units: 4*
- KIN 4004 - Elementary School Physical Education *Units: 4*
- KIN 4006 - Secondary School Physical Education *Units: 4*
- KIN 4008 - Adapted Physical Activity *Units: 4*
- KIN 4031 - Professional Field Experience II *Units: 1-4*
- KIN activities *Units: 6-10*

At least one in each of swimming, combative, team, individual or dual, fitness activities. One beginning course must be repeated at the intermediate level.

Social Science, Single Subject Matter Preparation

Completion of the Single Subject Matter Preparation Program in Social Science is certified by the Department of History. The program may be completed by students in any major, but overlaps major requirements in several Social Science fields such as History, Political Science, Geography, and Economics. The Single Subject Matter Preparation program in Social Science requires 84 units. This program has been designed to meet CCTC standards. For additional information, contact the Social Science Coordinator in the Department of History: Meiklejohn Hall 4031; 510-885-3207; website: <http://csueastbay.edu/history>.

I. Core Curriculum (48 units)

World History and Geography (16 units)

- HIST 1014 - World Civilizations I *Units: 4*

or

- HIST 1017 - Ancient World Civilizations *Units: 4*
- HIST 1015 - World Civilizations II *Units: 4*
- HIST 1016 - World Civilizations III *Units: 4*
- GEOG 2300 - Cultural Geography *Units: 4*

U.S. History and Geography (12 units)

- HIST 1101 - History of the United States to 1877 *Units: 4*
- HIST 1102 - History of the United States Since 1877 *Units: 4*
- GEOG 3360 - Historical Geography of North America *Units: 4*

California History (4 units)

- HIST 3500 - History of California *Units: 4*

American Government (8 units)

- POSC 1201 - American Political Institutions *Units: 4*
- POSC 1202 - Public Policy/California Politics *Units: 4*

Economics (8 units)

- ECON 2301 - Principles of Microeconomics *Units: 4*
- ECON 2302 - Principles of Macroeconomics *Units: 4*

II. Breadth and Perspectives (35 units)

Historiography and Research Methods (4 units)

- HIST 3010 - Historical Writing *Units: 4*

History/Social Science Teaching (3 units)

- TED 3001 - Exploring Education *Units: 3*

American Democracy (12 units)

One of the following:

- HIST 3412 - The American Revolution *Units: 4*
- HIST 3413 - The New Republic *Units: 4*
- HIST 3414 - Civil War and Reconstruction *Units: 4*

One of the following:

- HIST 3415 - America in the Age of Empire *Units: 4*
- HIST 3416 - The Great Depression and World War II *Units: 4*
- HIST 3417 - Cold War America *Units: 4*

One of the following:

- POSC 3111 - The American Presidency *Units: 4*
- POSC 3120 - State and Local Politics and Government *Units: 4*
- POSC 3150 - Politics of California *Units: 4*
- POSC 3410 - Law and Society *Units: 4*
- POSC 3441 - American Constitutional Law: Government *Units: 4*
- POSC 3442 - American Constitutional Law: Rights *Units: 4*

American Diversity (4 units)

One of the following:

- ES 3810 - History of Minority Education *Units: 4*
 - HIST 3571 - Women in American History *Units: 4*
 - HIST 3572 - American Women in the Twentieth Century *Units: 4*
 - POSC 3333 - Ethnic and Minority Politics *Units: 4*
 - POSC 3340 - Women and Politics *Units: 4*
 - SOC 3420 - Social Inequality *Units: 4*
 - SOC 3425 - Prejudice and Discrimination *Units: 4*
 - SOC 3520 - Sociology of Race and Ethnic Relations *Units: 4*
- WOST 3420 - Minority Women in America *Units: 4*
or
- ES 3420 - Minority Women in America *Units: 4*

Global Perspectives (12 units)

One of the following:

- GEOG 3515 - Geography of South America *Units: 4*
- GEOG 3540 - China and Japan *Units: 4*
- GEOG 3550 - Geography of Southeast Asia *Units: 4*

One of the following:

- HIST 3017 - The Twentieth Century *Units: 4*
- HIST 3160 - Europe in the 19th Century *Units: 4*
- HIST 3223 - History of the Soviet Union *Units: 4*

One of the following:

- HIST 3305 - Modern South Asia *Units: 4*
- HIST 3312 - Modern China *Units: 4*
- HIST 3313 - People's Republic of China *Units: 4*
- HIST 3325 - Postwar Japan *Units: 4*
- HIST 3345 - The Modern Middle East *Units: 4*
- HIST 3605 - Modern Latin America *Units: 4*

III. Assessment Capstone (1 unit)

- HIST 4500 - The California History/Social Science Framework *Units: 1*

Note:

No more than 8 units may be taken on a CR/NC basis. No more than 8 units with a grade below "C" may be submitted in fulfillment of any program requirement. To successfully complete the program, a student must have a minimum 2.5 GPA in courses taken to fulfill program requirements or complete additional coursework to be determined by the program advisor. Students must successfully complete the "capstone course" in the final quarter of their participation in the program.

Preprofessional Programs

Preprofessional Programs

- Biomedical Sciences
- Allied Health Fields
- Pre-Law Studies
- Pre-Theological Studies

Preprofessional Health Academic Program (PHAP)

Director of PHAP: Dr. Oscar Wambuguh

Office: North Science 113

Phone: 510-885-2366

E-mail: phap@csueastbay.edu

<http://www20.csueastbay.edu/csci/departments/phap/index.html>

Biomedical Sciences

A student interested in entering medicine, dentistry, optometry, pharmacy, physical therapy, veterinary science, or allied health sciences should contact the Pre-Professional Health Academic Program at SCN 113 (510-885-4764). The current director of the program is Dr. Oscar Wambuguh, an associate professor of health sciences and pre-professional health advisor. The assistant director of the program is Dr. Allan Ancheta, a faculty member in PHAP also working as a pre-professional health advisor. Drs. Helen Kwan and Faezeh Manshadi are two additional faculty and pre-professional health advisors in the program. All advisors hold regular pre-health advising hours available in SCN 113 or by sending an e-mail to phap@csueastbay.edu. Peer student advisors (officers of the PHAP Student Club) hold regular office hours available at the PHAP office SCN 113. We also have tutors in each of the courses we offer available for consultation in SCN 113.

The Pre-Professional Health Academic Program will direct the student to a pre-professional advisor to receive program information and individual counseling about meeting the requirements for admission to professional schools. The program requires that students meet with academic pre-health advisors frequently throughout their college training. The program offers a letter service that organizes the student's individual letters of recommendation as a package sent to professional schools.

The required courses for the various professional fields do not comprise a major, therefore the student is free to select any major. Accordingly, in addition to the pre-professional advisor, each student is assigned an academic advisor in their major as do all other students at the university. Admission to professional schools is highly competitive. Consequently, the major selected should be one representing an alternate career objective satisfactory to the student.

Students intending to enter the health professions should plan on completing a baccalaureate degree with an appropriate academic major. Many students major in biological sciences (any option), biochemistry or health sciences (pre-doctoral option B3), but majors in the social sciences and the humanities are acceptable to professional schools, provided the specified courses in science have been completed.

Admission to professional schools is restricted to those students who have developed a facility in the use of English and in quantitative thinking, who have mastered the fundamentals of the physical and biological sciences, studied in depth one of the major fields of knowledge, and obtained a competitive score in the required entrance tests.

Information about the new 2015 MCAT required for all pre-medical students is available here:

<https://www.aamc.org/students/applying/mcat/mcat2015/>.

Students are urged to schedule this test during Spring of their junior year. The Dental/Optomety/Pharmacy/Veterinary Admission Test, required of all pre- by application throughout the year. Students should plan to take this test in Spring of their junior year. For further details, or visit the respective test websites.

Courses such as ANTH 3720 (Medical Anthropology), HSC 3300 (Healthcare Systems in the U.S.), PHIL 3152 (Biomedical Ethics), HSC 3200 (Environmental Health), HSC 3250 (Genes and Human Health), SOC 4720 (Medical Sociology) and HSC 3720 (Medical Humanities) will be of value to students in broadening their educational experiences and increasing their skills; in addition to preparing students for interviews at professional schools. Some of these courses may be counted for General Education, depending upon the major. More information is available at the program website or further discussion with a pre-health advisor.

Sample programs for pre-professional students in Medicine (including allopathic, osteopathic, podiatric, and veterinary medicine) and Dentistry can be found at <http://www20.csueastbay.edu/csci/departments/phap/index.html>. Please consult with a pre-health advisor first, before embarking on any of these programs.

Allied Health Fields

The following programs are offered by the university in the allied health fields. The Department of Biological Sciences has an Option in Biomedical Laboratory Sciences in its B.S. degree major. Options in Physical Activity Studies, Exercise, Nutrition, and Wellness, Therapeutic Studies, Social Justice, and Pre-Physical Therapy are in the B.S. degree major available in the Department of Kinesiology. The Department of Nursing and Health Sciences has a B.S. degree major both in Nursing and in Health Sciences. The graduate department of Educational Psychology has an M.S. in Counseling. Both B.S. and M.S. programs in Speech Pathology and Audiology are offered as well as a Clinical Rehabilitative Services Credential. The Department of Public Affairs and Administration offers an interdisciplinary Master of Science in Health Care Administration degree. These programs are described in the alphabetical listing in this catalog. Please contact the appropriate departments and schools for additional information.

Pre-Law Studies

The study of law is a postgraduate professional program, usually requiring three years of full-time study beyond the completion of the bachelor's degree. No specific pre-law undergraduate program is required for admission to law schools. However, for students wishing to focus on legal studies at Cal State East Bay, the Political Science Department has a Pre-Law Option in the Political Science Major.

Students intending to enter law school commonly complete undergraduate majors in political science, philosophy, economics, business, or history. The pre-law student's undergraduate plan of study should include among its objectives a facility in the proper use of written and spoken English, a sampling of undergraduate law courses, one or more critical/logical thinking courses, and a basic understanding of government and economics. Some law schools recommend that students take a basic accounting course, particularly if they are interested in business or tax law.

Students planning to enter law school should consult the Department of Political Science for additional information.

Most accredited law schools require that applicants complete the Law School Admission Test. The LSAT is typically given in September, December, February, and June at one or more testing centers in the Bay Area. Pre-law students should obtain LSAT registration materials and law school applications early in their final year of college. Copies of these materials can also be secured from the pre-law advisor in the Department of Political Science and from the Testing Office, Library, Room LI 3165A. The Political Science Department Library also has a copy of the Law School Guidebook and many law school catalogs.

Pre-Theological Studies

The American Association of Theological Schools recommends that students anticipating graduate theological education take a broad liberal arts program leading to the B.A. degree. A reading knowledge of at least one language other than English is highly recommended. Students should elect courses which will sharpen their conceptual processes (logic, scientific method, literary or historical research) and should have more than an introduction to the world of people and ideas, the world of nature, and the world of human affairs. Students planning to enter theological schools should consult the Department of Philosophy (MI 4006) about their major and baccalaureate degree.

Other Programs

International Programs of the CSU

Information

Center for International Education
Library Complex 2550
Phone: (510) 885-2880
E-mail: cie@csueastbay.edu
Website: www.calstate.edu/ip

Campus Faculty Representative, Academic Council on International Programs: Meiling Wu, Professor, Department of Modern Languages and Literatures

Campus Coordinator: Kelly Moran, Director, Center for International Education

Developing intercultural communication skills and international understanding among its students is a vital mission of The California State University (CSU). Since its inception in 1963, the CSU International Programs has contributed to this effort by providing qualified students an affordable opportunity to continue their studies abroad for a full academic year. More than 20,000 CSU students have taken advantage of this unique study option.

International Programs participants earn resident academic credit at their CSU campuses while they pursue full-time study at a host university or special study center abroad. The International Programs serves the needs of students in over 100 designated academic majors. Affiliated with more than 50 recognized universities and institutions of higher education in 18 countries, the International Programs also offers a wide selection of study locales and learning environments.

Australia

Griffith University, Macquarie University, Queensland University of Technology, University of Queensland, University of Western Sydney, Victoria University

Canada

Concordia University (Montréal)

Chile

Pontificia Universidad Católica de Chile (Santiago)

China

Peking University (Beijing)

Denmark

Danish Institute for Study Abroad (international education affiliate of the University of Copenhagen)

France

Institut Catholique de Paris, Université de Provence (Aix-en-Provence), Universités de Paris I, III, IV, VI, VII, VIII, X, XI, XII, XIII, Université Paris-Est Marne-la-Vallée, Université d'Evry Val d'Essonne, and Université de Versailles Saint-Quentin-en-Yvelines.

Germany

University of Tübingen and a number of institutions of higher education in the Federal state of Baden-Württemberg

Ghana

University of Ghana, Legon

Israel

University of Haifa

Italy

CSU Study Center (Florence), Università degli Studi di Firenze, Accademia di Belle Arti Firenze

Japan

Waseda University (Tokyo), University of Tsukuba

Korea

Yonsei University (Seoul)

Mexico

Instituto Tecnológico y de Estudios Superiores de Monterrey, Campus Querétaro

South Africa

Nelson Mandela Metropolitan University, Port Elizabeth

Spain

Universidad Complutense de Madrid, Universidad de Granada, Universidad de Jaén

Sweden

Uppsala University

Taiwan

National Taiwan University (Taipei)

United Kingdom

Bradford University, Bristol University, Hull University, Kingston University, Swansea University

International Programs pays all tuition and administrative costs for participating California resident students to the same extent that such funds would be expended to support similar costs in California. Participants are responsible for all tuition and program fees, personal costs, such as transportation, room and board, and living expenses. Financial aid, with the exception of Federal Work-Study, is available to qualified students.

To qualify for admission to the International Programs, in most programs students must have upper division or graduate standing at a CSU campus by the time of departure. Students at the sophomore level may, however, participate in programs in China, France, Germany, Korea, Mexico, Spain, Sweden and Taiwan. California Community Colleges transfer students are eligible to apply directly from their community colleges. Students must

also possess a current cumulative grade point average of 2.75 or 3.0, depending on the program for which they apply. Some programs also have language study and/or other coursework prerequisites.

Additional information and application materials may be obtained from:

Center for International Education
Library Complex 2550
Phone: (510) 885-2880
E-mail: cie@csueastbay.edu

You may also write to:

The California State University International Programs
401 Golden Shore, Sixth Floor
Long Beach, California 90802-4210
www.calstate.edu/ip

Applications for the academic year overseas must be submitted by the preceding February 1. (Note: The deadline for programs in Australia and South Africa is September 1.)

Graduate Study

Please see "Credit for Transferred Courses" in the Graduate Degree Information chapter.

Other Programs

Please see "Study Abroad," in the Student Services chapter.

Courses

Courses taken by students enrolled in the International Programs are shown on the Cal State East Bay transcripts in terms of Cal State East Bay catalog designations. In the absence of equivalents, courses are shown on Cal State East Bay transcripts as follows:

- (Dept.) 9100 IP (course title) Lower Division
- (Dept.) 9300 IP (course title) Upper Division
- (Dept.) 9500 IP (course title) Graduate

Repetition of Courses

You may repeat a course in which you have earned a grade of C-, D+, D, F, WU, NC, or IC for grade forgiveness two times, which means your earlier attempt(s) is ignored in GPA calculations, but not removed from your record, subject to the following conditions:

General Education course equivalencies:

Certain General Education courses are considered equivalent for the purposes of grade forgiveness. Therefore, students will receive credit for only one course in each of the following groups.

- ART 1010 - Introduction to World Art History *Units: 4*
- ART 1011

- BIOL 1000 - Basic Concepts in Biology *Units: 5*
- BIOL 1001 - Introduction to Biology *Units: 4*
- BIOL 1005 - How Things Work: The Human Body *Units: 4*
- BIOL 1007 - Human Biology *Units: 4*

- BIOL 1002 - Introduction to Biology Lab *Units: 1*

- BIOL 1004
- BIOL 2010 - Human Physiology and Anatomy I *Units: 5*
- BIOL 2011 - Anatomy and Physiology I *Units: 5*
- BIOL 2020 - Human Physiology and Anatomy II *Units: 5*
- BIOL 2021 - Anatomy and Physiology II *Units: 5*
- CHEM 1000 - Popular Topics in Chemistry *Units: 4*
- CHEM 2001
- CHEM 2002
- CHEM 1601 - Basic Chemistry for the Health Sciences *Units: 4*
- CHEM 1605 - Basic Chemistry for Healthier Living *Units: 4*
- CHEM 1610 Survey of Basic Chemistry for Health Sciences
- CHEM 1615 Survey of Basic Chemistry for Healthier Living
- DANC 1201 - Dance for All Bodies and Abilities *Units: 4*
- DANC 1202 - World Dance: Oral Traditions and the Stage *Units: 4*
- DANC 1203 - Exploring the Creative and Spiritual *Units: 4*
- ECON 1000 - Economics of Public Issues *Units: 4*
- ECON 1888
- ENSC 2800 - Environmental Problems of California *Units: 4*
- ENSC 2801 - Global Environmental Problems *Units: 4*
- ENSC 2802 - Global Environmental Issues *Units: 4*
- ENVT 2000 - Introduction to Environmental Studies *Units: 4*
- ENVT 2001 - Environmental Perspectives *Units: 4*
- ES 1002
- ES 2002
- GEOL 1001 - Introduction to the Earth Sciences *Units: 4*
- GEOL 1003 - How Earth Systems Work *Units: 4*
- GEOL 1005 - Earth Science *Units: 4*
- GEOL 1006 - Earth Systems and Energy *Units: 4*
- GEOL 2101 - Physical Geology *Units: 5*
- GEOL 2300 - Natural Disasters *Units: 4*
- GEOL 2301 - Natural Hazards *Units: 4*
- HIST 1014 - World Civilizations I *Units: 4*
- HIST 1017 - Ancient World Civilizations *Units: 4*
- HIST 1015 - World Civilizations II *Units: 4*
- HIST 2018
- HIST 1016 - World Civilizations III *Units: 4*
- HIST 2019
- HSC 1100 - Health: Maintenance of Wellness *Units: 4*
- KIN 1625 - Nutrition and Performance *Units: 4*
- KIN 1626 - Nutrition and Performance for Bodies at Play *Units: 4*

- KIN 2700 - Women and Sport *Units: 4*
- KIN 1888

- LIBY 1210 - Introduction to Information Literacy *Units: 2*
- LIBY 1551 - Information Skills in the Electronic Age *Units: 2*

- MUS 1000

- MUS 1004 - Introduction to World Music *Units: 4*
- or*
- ANTH 1004

- MUS 1014 - Introduction to World Music History *Units: 4*

- MUS 1006 - History of Rock and Roll *Units: 4*
- MUS 2130

- PHIL 1102 - Issues in Environmental Ethics *Units: 4*
- PHIL 1103 - Science, Ethics, and Technology *Units: 4*
- PHIL 1104 - The Philosophy of Environmental Science and Policy *Units: 4*

- PHIL 1605
- PHIL 2605 - Introduction to Asian Religion *Units: 4*

- PHYS 1500 - How Things Work *Units: 4*
- PHYS 1700 - Elementary Physics *Units: 4*

- PHYS 1600
- PHYS 1800 - Astronomy *Units: 4*

- PSYC 1000 - General Psychology *Units: 5*
- PSYC 1001 - General Psychology and Society *Units: 5*
- PSYC 1005 - General Psychology for Healthier Living *Units: 5*
- PSYC 2004
- PSYC 2009

- SOC 1000 - Introduction to Sociology *Units: 4*
- SOC 1002 - Introduction to Sociology of Individual and Society *Units: 4*

- STAT 1000 - Elements of Probability and Statistics *Units: 5*
- STAT 2008
- STAT 2010 - Elements of Statistics for Business and Economics *Units: 5*

- THEA 1010
- THEA 1011
- THEA 1016 - All the World's a Stage: Theatre for Social Change *Units: 4*

You must file a "Petition for Grade Forgiveness" with the General Education Office, Room 1500, Student Services and Administration Building, if:

- the course prefix and/or number has changed, or the course is Independent Study.
- your first attempt was at another accredited post-secondary institution.

You pick up the petition in the department offering the course at Cal State East Bay. The chair of the department must certify that the courses are equivalent. (This means the course content is substantially identical. It does not mean merely that the courses meet the same requirement.) After the petition has been approved by the chair of the department offering the course, you must file it with the GE Director in the GE Office before the end

of the Late Add period for that quarter. The GE Director must then approve your petition. A denied petition is promptly mailed to you by the GE Office. An approved petition is sent to the Office of the Registrar. The previous attempt will be excluded from your GPA calculations after the end of the quarter in which you repeat the course and may not be reflected in that quarter's grade report.

Note:

The CSU system normally forbids retroactive Grade Forgiveness. File your petition before reregistering for the course to give yourself time to adjust your program if your petition is denied.

University Honors Program

University Honors Courses

One of the requirements of graduation from the University Honors Program is completion of 20 units of University Honors Courses with at least 8 units outside the major.

Learn more about the requirements to graduate from the University Honors Program.

Types of University Honors Courses

University Honors Courses are of several types, including:

- regular classes in which the instructor agrees to design and grade a special extra project to be completed by the University Honors Student.
- one-unit seminar classes, restricted to University Honors Students.
- independent study/research classes at the upper division level in which a University Honors Student works closely with a faculty member on a project.

Criteria for University Honors Courses

Honors work must extend beyond the normal course work. In addition, honors work must place expanded intellectual demands on the student and be consistent with the highest standards of rigorous academic performance. To fulfill this standard:

- The honors work should be extra, yet related, work that is above the normal level of course work. It should be given with a greater expectation of performance on the part of the student. This might include, but is not limited to, additional readings and/or additional assignments such as papers, speeches, presentations, research proposals, artistic or literary works, performances, computer programs, laboratory projects, case studies, etc.
- The honors work can either explore other dimensions and applications of the subject matter (e.g. the interdisciplinary nature of the subject) or delve into a narrow and specific area of the subject in expanded detail (e.g. work that is a preview of graduate school experience).
- The honors work should include additional faculty effort in supervision, guidance, and ongoing assessment, yet it should also require substantial independence on the part of the student.
- Honors work should not be considered "extra credit" in determining the student's course grade. Honors work is considered separate from regular course grading. Students receive the University Honors Course credit designation if their work is completed at an acceptable level.

Honors units will only be assigned upon completion of courses approved by the University Honors Program Director in which the student earns a "B" or better and completes an honors project to the satisfaction of the instructor of the course. University Honors Courses may be in the student's major or minor, as well as in general education, and/or free electives. At least 8 honors units, however, must be taken outside the student's major. University Honors Courses may not be taken "credit/no credit."

To obtain approval for credit for a University Honors Course, students must work with their professor to complete and sign the University Honors Contract. A contract must be completed for each University Honors Course. Signed contracts are due to the University Honors Program office, Student Services Building 4500, by the end of the third full week of the quarter. The contracts must be approved by the University Honors Program. At the end of the course, the student must contact the professor to obtain a signature confirming that the student completed the course with a grade of B or better and completed the honors work or project.

Download a contract.

Review sample contracts: [Sample Contract](#)

College and Department Information

CSU East Bay

College of Business and Economics

California State University, East Bay
25800 Carlos Bee Blvd., VBT 129
Hayward, CA 94542
(510) 885-3323

<http://www20.csueastbay.edu/cbe/index.html>

Office Hours: 8 a.m. - 5 p.m.. M-F

CBE Undergraduate Advising

VBT 129
(510) 885 - 3323
Email: cbe_ssc@csueastbay.edu

CBE Graduate Advising

VBT 132
(510) 885 - 2419
Email: cbe_grad@csueastbay.edu

Graduate Programs Office

VBT 430

(510) 885 - 2419

Email: cbe_grad@csueastbay.edu
Website: www20.csueastbay.edu/cbe/grad-advising.html
Director: Joanna Lee (VBT 429)

BSBA Online Program

VBT 459
(510) 885 - 3376
Email: cbe_bsba_online@csueastbay.edu or claire.abshire@csueastbay.edu

Jagdish Agrawal, Dean

Mission Statement:

CBE provides life-changing, quality business education to prepare students from diverse backgrounds to become successful business professionals and leaders.

Vision

We aspire to be a leading business school known for making a difference in the lives of our students and for our impact on the world.

Values

In support of our mission, we value:

- Ethical behavior and personal integrity
- Collegiality and mutual respect
- Collaboration for learning, scholarship, and community engagement
- Social and environmental responsibility
- Inclusive learning environment for a diverse student population
- Innovative thinking and a global mindset

Expected Outcomes

- Student professional success.
- Innovative academic programs meeting business and professional needs.
- Improvement in student learning based on teaching innovations.
- Intellectual contributions to the body of knowledge in the theory, practice and teaching of business.

Institutes and Centers

Center for Economic Education

Director: Jane E. Lopus

China America Business and Education Center (CABEC)

Director: Nancy Mangold

Human Investment Research and Education (HIRE) Center

Interim Director: Glen Taylor

Smith Center for Private Enterprise Studies

Director: Stephen Shmanske

Student Service Center: (VBT 129, 510-885-3323)

Email: cbe_ssc@csueastbay.edu

Website: <http://www.csueastbay.edu/cbe>

All degree programs in the College of Business and Economics are accredited by the AACSB International (Association to Advance Collegiate Schools of Business).

Department of Accounting and Finance (Undergraduate)

Departments of Accounting and Finance (VBT 442, 510-885-3397)

Professors Emeriti

Christopher W. K. Lubwama, Ph.D. Simon Fraser University (Canada)

Professors

Micah Frankel, Ph.D. University of Arizona
Ching-Lih Jan, Ph.D. University of California, Berkeley
Nancy R. Mangold (Chair), Ph.D. University of California, Berkeley
Fung-Shine Pan, Ph.D. University of California, Berkeley
Diane Satin, Ph.D. University of California, Berkeley
Tammie X. Simmons-Mosley, Ph.D. University of Wisconsin-Madison

Associate Professors

Eric Fricke, Ph.D. Pennsylvania State University
Siu-Kuen Scott Fung, D.B.A. Boston University
M. Sinan Goktan, Ph.D. The University of Texas at Dallas
Y. Robert Lin, Ph.D. University of California, Los Angeles
Kim Shima, Ph.D. University of Hawai'i at Manoa
John Tan, Ph.D. University of South Florida
Jing-wen Yang, Ph.D. University of Maryland

Assistant Professors

Brian Du, Ph.D. Rutgers University
Ying Guo, Ph.D. University of Hawai'i at Manoa
Pei Hui Hsu, Ph.D. University of Oregon
Dongliang (Ken) Lei, Ph.D. The City University of New York
Robert Loveland, Ph.D. University of Georgia

Department of Accounting and Finance (Graduate)

Department of Accounting and Finance (VBT 442, 510-885-3397)

Professors Emeriti

Doris G. Duncan, Ph.D. Golden Gate University
Christopher W. K. Lubwama, Ph.D. Simon Fraser University (Canada)

Professors

Micah Frankel, Ph.D. University of Arizona
Ching-Lih Jan, Ph.D. University of California, Berkeley
Nancy R. Mangold (Chair), Ph.D. University of California, Berkeley
Fung-Shine Pan, Ph.D. University of California, Berkeley
Diane Satin, Ph.D. University of California, Berkeley
Tammie X. Simmons-Mosley, Ph.D. University of Wisconsin-Madison

Associate Professors

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M. Sinan Goktan, Ph.D. The University of Texas at Dallas
Y. Robert Lin, Ph.D. University of California, Los Angeles
Kim Shima, Ph.D. University of Hawai'i at Manoa
Jing-wen Yang, Ph.D. University of Maryland

John Tan, Ph.D. University of South Florida

Assistant Professors

Brian Du, Ph.D. Rutgers University

Dongliang Lei, Ph.D. Baruch College, The City University of New York

Ying Guo, Ph.D. University of Hawai'i at Manoa

Pei Hui Hsu, Ph.D. University of Oregon

Robert Loveland, Ph.D. University of Georgia

Department of Economics (Undergraduate)

Department of Economics

College of Business and Economics

Office: Valley Business and Technology Center, Rm. 442

Phone: (510) 885-3265

Student Service Center: (VBT 129, 510-885-3323)

Email: cbe_ssc@csueastbay.edu

Website: <http://www.csueastbay.edu/cbe>

Professors Emeriti

Anthony K. Lima, Ph.D. Stanford University

Lynn C. Paringer, Ph.D. University of Wisconsin, Madison

Professors

James C. W. Ahikpor, Ph.D. University of Toronto (Canada)

Gregory B. Christainsen, Ph.D. University of Wisconsin, Madison

Jed DeVaro (Chair), Ph.D. Stanford University

Associate Professors

Ryan Lampe, Ph.D. Stanford University

Christian Roessler, Ph.D. The University of Melbourne (Australia)

Assistant Professors

Brian Adams, Ph.D. University of Minnesota

Joseph Kuehn, Ph.D. University of California, Los Angeles

Jung You, Ph.D. Rice University

Department of Economics (Graduate)

Department of Economics (VBT 442, 510-885-3265)

Department of Economics

College of Business and Economics

Office: Valley Business & Technology Center, VBT 442

Phone: (510) 885-3265

Professors Emeriti

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Assistant Professors

Brian Adams, Ph.D. University of Minnesota
Joseph Kuehn, Ph.D. University of California, Los Angeles
Jung You, Ph.D. Rice University

M.A. Program Director: Christian Roessler

Department of Management (Undergraduate)

Department of Management (VBT 440, 510-885-3307)

Professor Emeritus

Bijan Mashaw, Ph.D. Clemson University

Professors

Jed DeVaro, Ph.D. Stanford University
Hongwei Du, Ph.D. Florida Institute of Technology
Vishwanath Hegde, Ph.D. University of Pittsburgh
Xinjian Lu, Ph.D. University of Waterloo, Canada
Kenneth Pefkaros, Ph.D. University of Delaware
Zinovy Radovilsky (Chair), Ph.D. Scientific Research Institute of Labor (Moscow)
Asha Rao, Ph.D. Temple University
Glen Taylor, Ph.D. York University (Canada)
Gregory Theyel, Ph.D. Clark University
Donna L. Wiley, Ph.D. University of Tennessee at Knoxville

Associate Professors

Ekin Alakent, Ph.D. University of Texas at Dallas
Sandip Basu, Ph.D. University of Washington
Alan P. Goldberg, Ph.D. University of Massachusetts
Sharon Green, Ph.D. University of California, Berkeley
Yi Jiang, Ph.D. Ohio State University
Daniel E. Martin, Ph.D. Howard University
H. Steven Peng, Ph.D. York University (Canada)
Chongqi Wu, Ph.D. University of Illinois at Urbana-Champaign
Jiming Wu, Ph.D. University of Kentucky

Assistant Professors

Ken Chung, Ph.D. Rutgers University
Izzet Darendeli, Ph.D. Temple University
Kaumudi Misra, Ph.D. Michigan State University
Balaraman Rajan, Ph.D. Simon School of Business, University of Rochester
Stephanie Seitz, Ph.D. State University of New York at Buffalo
Lan Wang, Ph.D. University of Florida, Gainesville

Department of Management (Graduate)

Department of Management (VBT 440, 510-885-3307)

Professor Emeritus

Bijan Mashaw, Ph.D. Clemson University

Professors

Jed DeVaro, Ph.D. Stanford University

Hongwei Du, Ph.D. Florida Institute of Technology

Vishwanath Hegde, Ph.D. University of Pittsburgh

Xinjian Lu, Ph.D. University of Waterloo, Canada

Kenneth Pefkaros, Ph.D. University of Delaware

Zinovy Radovilsky (Chair), Ph.D. Scientific Research Institute of Labor (Moscow)

Asha Rao, Ph.D. Temple University

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Balaraman Rajan, Ph.D. Simon School of Business, University of Rochester

Stephanie Seitz, Ph.D. State University of New York at Buffalo

Lan Wang, Ph.D. University of Florida, Gainesville

Department of Marketing and Entrepreneurship (Undergraduate)

Department of Marketing and Entrepreneurship (VBT 440, 510-885-3326)

Professor Emeritus

Norman Smothers, Ph.D. University of California, Berkeley

Professors

Jagdish Agrawal, Ph.D. State University of New York at Buffalo

Stevina Evuleocha, Ph.D. Ohio University

Sweetie Law, Ph.D. Ohio State University

C. Joanna Lee (Chair), Ph.D. University of Texas at Austin

Cesar Maloles, Ph.D. City University of New York

Steve Ugbah, Ph.D. Ohio University

Associate Professors

Yi He, Ph.D. University of Hawai'i

Lan Wu, Ph.D. Georgia Institute of Technology

Assistant Professors

Judy Ma, Ph.D. Rensselaer Polytechnic Institute

Joon-Hee Oh, Ph.D. Georgia State University

Department of Marketing and Entrepreneurship (Graduate)

Department of Marketing and Entrepreneurship (VBT 440, 510-885-3326)

Professor Emeritus

Norman Smothers, Ph.D. University of California, Berkeley

Professors

Jagdish Agrawal, Ph.D. State University of New York at Buffalo

Stevina Evuleocha, Ph.D. Ohio University

Sweety Law, Ph.D. Ohio State University

C. Joanna Lee (Chair), Ph.D. University of Texas at Austin

Cesar Maloles, Ph.D. City University of New York

Steve Ugbah, Ph.D. Ohio University

Associate Professors

Yi He, Ph.D. University of Hawai'i

Lan Wu, Ph.D. Georgia Institute of Technology

Assistant Professors

Judy Ma, Ph.D. Rensselaer Polytechnic Institute

Joon-Hee Oh, Ph.D. Georgia State University

CBE Graduate Programs

Graduate Programs

Director: Joanna Lee

Location: VBT 430

Phone Number: 510-885-2419

Description of Programs

The mission of the College of Business and Economics is to prepare students to make ethical choices and succeed in a dynamic business environment shaped by the challenges of a competitive global economy, emerging technologies, and diverse stakeholders. All CBE programs are accredited by AACSB International - The Association to Advance Collegiate Schools of Business.

The College of Business and Economics offers the following master's degrees:

1. **Master of Business Administration (M.B.A.);** *students may select one of the following options:*
 - a. Entrepreneurship
 - b. Finance

- c. Global Innovators
 - d. Human Resources and Organizational Behavior
 - e. Information Technology Management
 - f. Marketing Management
 - g. Operations and Supply Chain Management
 - h. Strategy and International Business
2. **Master of Science in Accountancy (M.S.A.)**
 3. **Master of Science in Business Administration (M.S.B.A.), Business Analytics**
 4. **Master of Arts (M.A.) in Economics**

College of Letters, Arts, and Social Sciences

California State University, East Bay
25800 Carlos Bee Blvd., MB 1501
Hayward, CA 94542
Phone: (510) 885-3161

<http://www20.csueastbay.edu/class/index.html>

Office Hours: 8 a.m.-5 p.m., M-F

Kathleen Roundtree, Dean

Mission Statement:

The College of Letters, Arts, and Social Sciences is committed to educational engagement through theory and practice, which enables our students to enhance their understanding and appreciation of the human condition, diverse cultures and values, the natural world, and their own communities. CLASS students graduate with the foundation to be ethical and productive individuals, effective citizens, and informed participants in a global society.

Contact CLASS

CLASS Student Service Center

Computer Labs & Smart Classrooms

Department of Anthropology, Geography and Environmental Studies (Undergraduate)

Anthropology

Department of Anthropology, Geography and Environmental Studies
College of Letters, Arts, and Social Sciences
Office: Robinson Hall 220
Phone: (510) 885-3168
Website: <http://www20.csueastbay.edu/class/departments/ages/index.html>

Professors Emeriti

Laurie J. Price, Ph.D. University of North Carolina, Chapel Hill

Associate Professors

William Henry Gilbert, Ph.D. University of California, Berkeley

Andrew Wong, Ph.D. Stanford University

Assistant Professors

Albert Gonzalez, Ph.D. Southern Methodist University

Geography

Department of Anthropology, Geography and Environmental Studies

College of Letters, Arts, and Social Sciences

Office: Robinson Hall 220

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Website: <http://www20.csueastbay.edu/class/departments/ages/index.html>

Professor Emeritus

Scott Stine, Ph.D. University of California, Berkeley

Professors

Karina Garbesi, Ph.D. University of California, Berkeley

David Larson (Chair), Ph.D. University of California, Berkeley

Michael Lee, Ph.D. London School of Economics (England)

Gary Li, Ph.D. State University of New York at Buffalo

Associate Professor

David Woo, Ph.D. University of California, Santa Barbara

Environmental Studies

Department of Anthropology, Geography and Environmental Studies

College of Letters, Arts, and Social Sciences

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Website: <http://www20.csueastbay.edu/class/departments/ages/index.html>

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David Larson (Chair), Ph.D. University of California, Berkeley

Michael Lee, Ph.D. London School of Economics (England)

Gary Li, Ph.D. State University of New York at Buffalo

Associate Professor

David Woo, Ph.D. University of California, Santa Barbara

California Studies

Department of Anthropology, Geography and Environmental Studies
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Office: Robinson Hall 220
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Professor Emeritus

Scott Stine (Anthropology, Geography and Environmental Studies), Ph.D. University of California, Berkeley

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David Larson (Anthropology, Geography and Environmental Studies), Ph.D. University of California, Berkeley

Associate Professors

Linda Ivey (History), Ph.D. Georgetown University
Robert A. Phelps (History), Ph.D. University of California, Riverside
Khal Schneider (History), Ph.D. University of California, Berkeley

Director: David Larson

Department of Anthropology, Geography and Environmental Studies (Graduate)

Anthropology

Department of Anthropology, Geography and Environmental Studies
College of Letters, Arts, and Social Sciences
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Professor Emeritus

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Associate Professor

William Henry Gilbert, Ph.D. University of California, Berkeley
Andrew Wong, Ph.D. Stanford University

Assistant Professors

Albert Gonzalez, Ph.D. Southern Methodist University

Graduate Coordinator: Andrew Wong

Geography

Department of Anthropology, Geography and Environmental Studies
College of Letters, Arts, and Social Sciences
Office: Robinson Hall 220
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Website: <http://www20.csueastbay.edu/class/departments/ages/index.html>

Professor Emeritus

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Professors

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David Larson (Chair), Ph.D. University of California, Berkeley
Michael Lee, Ph.D. London School of Economics (England)
Gary Li, Ph.D. State University of New York at Buffalo

Associate Professor

David Woo, Ph.D. University of California, Santa Barbara

Graduate Coordinator: David Woo

Department of Art (Undergraduate)

Department of Art

College of Letters, Arts, and Social Sciences

Office: Art and Education Bldg. 1233

Phone: (510) 885-3111

Website: <http://www20.csueastbay.edu/class/departments/art/>

Professors Emeriti

Phillip A. Hofstetter (Interim Chair), M.A. California State University, Hayward
Mark Levy, Ph.D. Indiana University

Professors

Michael Henninger, M.F.A. California College of Arts and Crafts
Scott H. Hopkins, M.F.A. University of Arizona
Grace Munakata, M.F.A. University of California, Davis
Amy Oakland, Ph.D. University of Texas at Austin
Gwyn Rhabyt, M.F.A. California College of Arts and Crafts
Suzy Wear, M.A. California State University, Hayward

Associate Professor

Janet Green, M.A. California State University, East Bay

Assistant Professor

Ian Pollock, M.F.A. University of California, Berkeley

Jessica Santone, Ph.D. McGill University (Canada)

Department of Art (Graduate)

Multimedia

Department of Art

College of Letters, Arts, and Social Sciences

Office: Art and Education 1233

Phone: (510) 885-3111

Email: multimedia@csueastbay.edu

Website: <http://multimedia.csueastbay.edu>

Professor Emeritus

Phillip Hofstetter (Art), M.A. California State University, Hayward

Professor

Gwyan Rhabyt (Art), M.F.A. California College of Arts and Crafts

Associate Professors

Janet Green (Art), M.A. California State University, Hayward

Rafael Hernandez (Music), D.M. Indiana University

Graduate Coordinator: Gwyan Rhabyt (Art)

Department of Communication (Undergraduate)

Department of Communication

College of Letters, Arts, and Social Sciences

Office: Meiklejohn Hall 3011

Phone: (510) 885-3292; FAX: (510) 885-4099

Website: <http://www20.csueastbay.edu/class/departments/communication/>

Professor Emerita

Sally K. Murphy, Ph.D. University of Minnesota, Minneapolis

Associate Professors

Grant Kien, Ph.D. University of Illinois at Urbana-Champaign

Terry L. West, Ph.D. Southern Illinois University

Assistant Professors

Katherine M. Bell, Ph.D. University of Washington

Lonny J. Brooks, Ph.D. University of California, San Diego

Mary Cardaras, Ph.D. Northeastern University

William Lawson, Ph.D. Florida State University

Yung-I Liu, Ph.D. Ohio State University

Department of Communication (Graduate)

Department of Communication

College of Letters, Arts, and Social Sciences

Office: Meiklejohn Hall 3011

Phone: (510) 885-3292 FAX: (510) 885-4099

Website: <http://www20.csueastbay.edu/class/departments/communication/>

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Associate Professors

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Terry L. West, Ph.D. Southern Illinois University

Assistant Professors

Katherine M. Bell, Ph.D. University of Washington

Lonny J. Brooks, Ph.D. University of California, San Diego

Mary Cardaras, Ph.D. Northeastern University

William Lawson, Ph.D. Florida State University
Yung-I Liu, Ph.D. Ohio State University

Graduate Coordinator: Katherine M. Bell, Ph.D.

Department of Communicative Sciences and Disorders (Undergraduate)

Department of Communicative Sciences and Disorders
College of Letters, Arts, and Social Sciences
Office: Music and Business Bldg. 1099
Phone: (510) 885-3233

Associate Professor Emeritus

Robert C. Peppard, Ph.D. University of Wisconsin, Madison

Associate Professor

Nidhi Mahendra (Chair), Ph.D. University of Arizona

Assistant Professors

Shubha P. Kashinath, Ph.D. Florida State University

Elena Dukhovny, Ph.D. University of California, Berkeley/San Francisco State University

Pradeep Ramanathan, Ph.D. University of Minnesota

Department of Communicative Sciences and Disorders (Graduate)

Department of Communicative Sciences and Disorders
College of Letters, Arts, and Social Sciences
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Phone: (510) 885- 3233

Associate Professor Emeritus

Robert C. Peppard, Ph.D. University of Wisconsin, Madison

Associate Professor

Nidhi Mahendra (Chair), Ph.D. University of Arizona

Assistant Professors

Shubha P. Kashinath, Ph.D. Florida State University

Elena Dukhovny, Ph.D. University of California, Berkeley/San Francisco State University

Pradeep Ramanathan, Ph.D. University of Minnesota

Graduate Coordinator: Robert C. Peppard

Department of Criminal Justice Administration (Undergraduate)

Department of Criminal Justice Administration
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 4006
Phone: (510) 885-3590
Website: <http://csueastbay.edu/criminaljustice>

Professor

Silvina Ituarte, Ph.D. Rutgers University

Associate Professors

Julie Beck, Ph.D. University of California, Santa Cruz
Keith Inman, M.Crim. University of California, Berkeley
Dawna Komorosky (Chair), Ph.D. Indiana University of Pennsylvania

Assistant Professors

Sanjay Marwah, Ph.D. George Mason University
Glen Trager, Ph.D. University of California, Irvine

Department of English (Undergraduate)

English

Department of English

College of Letters, Arts, and Social Sciences

Office: Music and Business Building, Room 2579

Phone: (510) 885-3151

Website: <http://www.csueastbay.edu/english/>

Professor Emeritus

E.J. Murphy, Ph.D. University of Illinois

Professors

Eileen A. Barrett, Ph.D. Boston College
Debra Barrett-Graves, Ph.D. University of Kentucky
Dennis M. Chester, Ph.D. University of Washington
Jacqueline Doyle, Ph.D. Cornell University
Susan A. Gubernat, M.F.A. University of Iowa
Stephen D. Gutierrez, M.F.A. Cornell University
Ke Zou, Ph.D. University of Southern California

Associate Professors

Eve M. Lynch, Ph.D. University of California, Davis
Sarah E. Nielsen (Acting Chair), Ph.D. University of California, Davis
Margaret Tomlinson-Rustick, Ph.D. Washington State University

Composition Coordinator: Margaret Tomlinson-Rustick

Lecturers

Cynthia Andrzejczyk
Sartaz Aziz
Scott Bentley
Sally Baxter
Mary D'Alleva
Ingrid Hufgard
Dale Ireland
Aaron Jason
Rochelle Nameroff
Michael Rovasio
Marina Sapozhnikov
Jeff Scott
Paul White

Department of English (Graduate)

Department of English

College of Letters, Arts, and Social Sciences

Office: Music College and Business Building, Rm 2579

Phone: (510) 885-3151

Website: <http://csueastbay.edu/english/>

Professor Emeritus

E.J. Murphy, Ph.D. University of Illinois

Professors

Eileen A. Barrett, Ph.D. Boston College

Debra Barrett-Graves, Ph.D. University of Kentucky

Dennis M. Chester, Ph.D. University of Washington, Seattle

Jacqueline Doyle, Ph.D. Cornell University

Susan A. Gubernat, M.F.A. University of Iowa

Stephen D. Gutierrez, M.F.A. Cornell University

Ke Zou, Ph.D. University of Southern California

Associate Professors

Eve M. Lynch, Ph.D. University of California, Davis

Sarah E. Nielsen (Acting Chair), Ph.D. University of California, Davis

Margaret Tomlinson-Rustick, Ph.D. Washington State University

Graduate Coordinator: Eve Lynch

Graduate TESOL Coordinator: Ke Zou

Director of Creative Writing: Stephen D. Gutierrez

Composition Coordinator: Margaret Tomlinson-Rustick

Department of Ethnic Studies (Undergraduate)

Department of Ethnic Studies

College of Letters, Arts, and Social Sciences

Office: Meiklejohn Hall 4006

Phone: (510) 885-3255, FAX: (510) 885-4786

Professors

Luz Calvo (Ethnic Studies), Ph.D. University of California, Santa Cruz

Richard A. García (History), Ph.D. University of California, Irvine

L. Iliana Holbrook (Modern Languages and Literatures), Ph.D. University of California, Davis

Michael Lee (Geography and Environmental Studies), Ph.D. London School of Economics (England)

Amy Oakland (Art), Ph.D. University of Texas at Austin

Associate Professors

Jesús Díaz-Caballero (Modern Languages and Literatures), Ph.D. University of Pittsburgh

Marcelo Paz (Modern Languages and Literatures), Ph.D. University of Cincinnati

Carlos Salomon (Ethnic Studies), Ph.D. University of New Mexico

Assistant Professors

Jakeya Caruthers, Ph.D. Stanford University

Director: Carlos Salomon

Filipino and Filipino American Studies Program (Undergraduate)

Filipino and Filipino American Studies

Filipino and Filipino American Studies Program
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 3118
Phone: (510) 885-4818

Director: Efren Padilla (Sociology and Social Services), Ph.D. Michigan State University

Note: The department is not accepting students for the Minor in Filipino and Filipino American Studies at this time. This Program will be discontinued effective Fall 2016.

Department of History (Undergraduate)

History

Department of History
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 4036
Phone: (510) 885-3207; FAX: (510) 885-4791
Website: <http://csueastbay.edu/history>

Professors

Dee E. Andrews, Ph.D. University of Pennsylvania
Richard A. Garcia, Ph.D. University of California, Irvine
Jessica Weiss, Ph.D. University of California, Berkeley

Associate Professors

Vahid Fozdar, Ph.D. University of California, Berkeley
Bridget Ford, Ph.D. University of California, Davis
Linda Ivey (Chair), Ph.D. Georgetown University
Robert A. Phelps, Ph.D. University of California, Riverside
Khal Schneider, Ph.D. University of California, Berkeley
Nancy M. Thompson, Ph.D. Stanford University

Assistant Professor

Elizabeth McGuire, Ph.D. University of California, Berkeley
Kevin Kaatz, Ph.D. Macquarie University, Sydney (Australia)

Graduate Coordinator: Khal Schneider

Asian Studies

Department of History
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 4036
Phone: (510) 885-3207

Professor

Meiling Wu (Modern Languages and Literatures), Ph.D. State University of New York at Binghamton

Associate Professors

Vahid Fozdar (History), Ph.D. University of California, Berkeley
Christopher Moreman (Philosophy), Ph.D. University of Wales, Lampeter
Maria Consuelo C. Ortuoste (Political Science), Ph.D. Arizona State University
Andrew Wong (Anthropology, Geography and Environmental Studies), Ph.D. Stanford University
David Woo (Anthropology, Geography and Environmental Studies), Ph.D. University of California, Santa Barbara

Director: Vahid Fozdar

Urban Studies

Department of History
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 4036
Phone: (510) 885-3207

Department of History (Graduate)

Department of History
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 4036
Phone: (510) 885-3207; FAX: (510) 885-4791
Website: <http://csueastbay.edu/history>

Professor Emeritus

Henry F. Reichman, Ph.D. University of California, Berkeley

Professors

Dee E. Andrews, Ph.D. University of Pennsylvania
Richard A. Garcia, Ph.D. University of California, Irvine
Jessica Weiss, Ph.D. University of California, Berkeley

Associate Professors

Vahid Fozdar, Ph.D. University of California, Berkeley
Bridget Ford, Ph.D. University of California, Davis
Linda Ivey (Chair), Ph.D. Georgetown University
Robert A. Phelps, Ph.D. University of California, Riverside
Khal Schneider, Ph.D. University of California, Berkeley
Nancy M. Thompson, Ph.D. Stanford University

Assistant Professor

Elizabeth McGuire, Ph.D. University of California, Berkeley
Kevin Kaatz, Ph.D. Macquarie University, Sydney (Australia)

Graduate Coordinator: Khal Schneider

Department of Human Development and Women's Studies (Undergraduate)

Human Development

Department of Human Development and Women's Studies

College of Letters, Arts, and Social Sciences

Office: Meiklejohn Hall 3069

Phone: (510) 885-3076

Website: <http://www20.csueastbay.edu/class/departments/humandev/index.html>

Professors Emeriti

Rainer Bauer, Ph.D. Stanford University

Professors

Lynn Comerford, Ph.D. State University of New York at Albany

Jiansheng Guo, Ph.D. University of California, Berkeley

Associate Professors

Steve Borish, Ph.D. Stanford University

Christina Chin-Newman, Ph.D. University of California, Santa Cruz

Patricia Drew, Ph.D. University of California, Santa Barbara

Keri K. O'Neal (Interim Chair), Ph.D. Texas Tech University

Assistant Professors

D. Xeno Rasmusson, Ph.D. University of Georgia

Sara A. Smith, Ph.D. University of Oxford (England)

Rachael Stryker, Ph.D. University of California, Berkeley

Women's Studies

Department of Human Development and Women's Studies

College of Letters, Arts, and Social Sciences

Office: Meiklejohn Hall 3069

Phone: (510) 885-3076

Website: <http://www20.csueastbay.edu/class/departments/humandev>

Professor Emeritus

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Professors

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Jiansheng Guo, Ph.D. University of California, Berkeley

Associate Professors

Steve Borish, Ph.D. Stanford University

Christina Chin-Newman Ph.D. University of California, Santa Cruz

Patricia Drew, Ph.D. University of California, Santa Barbara
Keri K. O'Neal (Interim Chair), Ph.D. Texas Tech University

Assistant Professors

D. Xenon Rasmussen, Ph.D. University of Georgia
Sara A. Smith, Ph.D. University of Oxford (England)
Rachael Stryker, Ph.D. University of California, Berkeley

International Studies Program (Undergraduate)

International Studies

College of Letters, Arts, and Social Sciences

Office: Robinson Hall RO 204

Phone: (510) 885-3155

Professors Emeriti

Norman A. Bowen (Political Science), Ph.D. State University of New York at Albany
Laurie Price (Anthropology, Geography and Environmental Studies), Ph.D. University of North Carolina, Chapel Hill

Professors

L. Iliana Holbrook (Modern Languages and Literatures), Ph.D. University of California, Davis
Michael D. Lee (Anthropology, Geography and Environmental Studies), Ph.D. London School of Economics (England)

Associate Professor

Vahid Fozdar (History), Ph.D. University of California, Berkeley
Andrew Wong (Anthropology, Geography and Environmental Studies), Ph.D. Stanford University

Director: Michael D. Lee

Liberal Studies Program (Undergraduate)

Liberal Studies Program

College of Letters, Arts, and Social Sciences

Office: Meiklejohn Hall, Room 3035

Phone: (510) 885-3852, **FAX:** (510) 885-2122

Associate Professor

Nancy M. Thompson (History), Ph.D. Stanford University

Director: Nancy M. Thompson

Coordinator, Bachelors Plus - Early Pathway (BPEP) Program: Nancy M. Thompson

Department of Modern Languages and Literatures (Undergraduate)

Department of Modern Languages and Literatures

College of Letters, Arts, and Social Sciences

Office: MB 2599

Phone: (510) 885-3211

Professors

L. Iliana Holbrook, Ph.D. University of California, Davis
Meiling Wu, Ph.D. State University of New York at Binghamton

Associate Professors

Jesús Díaz-Caballero, Ph.D. University of Pittsburgh
Monique Manopoulos (Chair), Ph.D. The University of Iowa
Marcelo Paz, Ph.D. University of Cincinnati
Amy June Rowley, M.S. Western Maryland College

Department of Music (Undergraduate)

Department of Music

College of Letters, Arts, and Social Sciences

Office: Music and Business Bldg. 2571

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Email: music@csueastbay.edu

Website: <http://music.csueastbay.edu>

Professor

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Associate Professors

John Eros (Chair), Ph.D. The University of Michigan, Ann Arbor

Rafael Hernandez, D.M. Indiana University

Peter K. Marsh, Ph.D. Indiana University

Assistant Professors

Dorsey M. Butler, III, D.M.A. University of Texas at Austin

Danielle Gaudry, D.M.A. University of Cincinnati

Omri Shimron, D.M.A. Eastman School of Music

Department of Music (Graduate)

Department of Music

College of Letters, Arts, and Social Sciences

Office: Music and Business Bldg. 2571

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Rafael Hernandez, D.M. Indiana University
Peter K. Marsh, Ph.D. Indiana University

Assistant Professors

Dorsey M. Butler, III, D.M.A. University of Texas at Austin
Danielle Gaudry, D.M.A. University of Cincinnati
Omri Shimron, D.M.A. Eastman School of Music

Graduate Coordinator: Peter K. Marsh

Department of Philosophy (Undergraduate)

Department of Philosophy

College of Letters, Arts, and Social Sciences

Office: Meiklejohn Hall 4006

Phone: (510) 885-3225, FAX: (510) 885-2123

Website: <http://www.csueastbay.edu/philosophy/>

Professor Emeritus

Marek W. Bielecki, Ph.D. University of Warsaw (Poland)

Professor

Jennifer L. Eagan, Ph.D. Duquesne University

Associate Professors

Barbara Hall, Ph.D. University of Arizona, J.D. DePaul University Law School
Christopher M. Moreman (Chair), Ph.D. University of Wales, Lampeter

Assistant Professor

Craig Derksen, Ph.D. University of Maryland

Department of Political Science (Undergraduate)

Political Science

Department of Political Science

College of Letters, Arts, and Social Sciences

Office: Meiklejohn Hall 4092

Phone: (510) 885-3221

Website: <http://www20.csueastbay.edu/class/departments/politicalscience/>

Professor Emeritus

Norman A. Bowen, Ph.D. State University of New York at Albany

Professors

Kim Geron (Chair), Ph.D. University of California, Riverside
David Sadofsky Baggins, Ph.D. Syracuse University

Associate Professor

Maria C. Ortuoste, Ph.D. Arizona State University

Assistant Professors

Elizabeth Bergman, Ph.D. Claremont Graduate University
Jeremiah Garretson, Ph.D. Vanderbilt University

International Business

College of Business and Economics

Student Services

Valley Business & Technology Center, Rm. 129

Phone (510) 885-3311

College of Letters, Arts, and Social Sciences

Department of Political Science, Meiklejohn Hall, Rm. 4092

Phone (510) 885-3221

Professor Emeritus

Norman A. Bowen (Political Science), Ph.D. State University of New York at Albany

Department of Public Affairs and Administration (Undergraduate)

Department of Public Affairs and Administration

Department of Public Affairs and Administration

College of Letters, Arts, and Social Sciences

Office: Meiklejohn Hall 4122

Phone: (510) 885-3282

Website: <http://www20.csueastbay.edu/class/departments/publicadmin/>

Professors

Linda Dalton, Ph.D. Radcliff College/Harvard University

Jennifer L. Eagan, Ph.D. Duquesne University

Toni E. Fogarty, Ph.D. University of California, Berkeley

O. Jombo ("Jay") Umeh (Chair), Ph.D. Texas Tech University

Associate Professors

Michael Y. Moon, Ph.D. Teachers College, Columbia University

Assistant Professor

Nicole Diggs, Ph.D. Florida Atlantic University

Department of Public Affairs and Administration (Graduate)

Public Administration

Department of Public Affairs and Administration

College of Letters, Arts, and Social Sciences

Office: Meiklejohn Hall 4122

Phone: (510) 885-3282

Website: <http://www20.csueastbay.edu/class/departments/publicadmin/>

Professors

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Jennifer L. Eagan, Ph.D. Duquesne University
Toni E. Fogarty, Ph.D. University of California, Berkeley
O. Jombo ("Jay") Umeh (Chair), Ph.D. Texas Tech University

Associate Professors

Michael Y. Moon, Ph.D. Teachers College, Columbia University

Assistant Professor

Nicole Diggs, Ph.D. Florida Atlantic University

Institute for Governmental Research and Training: Toni E. Fogarty (Director)

Department of Theatre and Dance (Undergraduate)

Theatre Arts

Department of Theatre and Dance
College of Letters, Arts, and Social Sciences
School of Arts and Media
Office: Robinson Hall 220
Phone: (510) 885-3118

Professors

Thomas C. Hird (Chair), M.F.A. University of California, Los Angeles
Rhoda Helfman Kaufman, Ph.D. University of California, Berkeley
Darryl V. Jones, M.F.A. The Boston University School of Theatre Arts

Associate Professors

Ann Fajilan, M.F.A. University of California, Davis
Nina O. Haft, M.F.A. University of Wisconsin
Marc Jacobs, M.F.A. California State University, Long Beach
Eric Kupers, M.F.A. University of California, Davis

Creative Video

Departments of Art, English, Communication, Theatre and Dance
College of Letters, Arts, and Social Sciences
Office: Robinson Hall 220
Phone: (510) 885-3118

Professor

Thomas C. Hird (Theatre and Dance), M.F.A. University of California, Los Angeles
Program Director: Thomas C. Hird

Department of Social Work (Undergraduate)

Department of Social Work
College of Letters, Arts, and Social Sciences
Office: Meiklejohn Hall 4064

Phone: (510) 885-4916

Website: <http://csueastbay.edu/socialwork/>

Professors

Dianne Rush Woods, Ph.D. University of California, Berkeley

Evaon Wong-Kim (Chair), Ph.D. University of California, Berkeley

Assistant Professors

Mavis Braxton-Newby, Ph.D. Walden University

Toni Naccarato, Ph.D. University of California, Berkeley

Macheo Payne, Ed.D. San Francisco State University

Sarah Taylor, Ph.D. University of California, Berkeley

Rose Wong, Ph.D. University of California, Berkeley

Department of Social Work (Graduate)

Department of Social Work

College of Letters, Arts, and Social Sciences

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Phone: (510) 885-4916

Website: <http://www.csueastbay.edu/socialwork/>

Professors

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Evaon Wong-Kim (Chair), Ph.D. University of California, Berkeley

Assistant Professors

Mavis Braxton-Newby, Ph.D. Walden University

Toni Naccarato, Ph.D. University of California, Berkeley

Macheo Payne, Ed.D. San Francisco State University

Sarah Taylor, Ph.D. University of California, Berkeley

Rose Wong, Ph.D. University of California, Berkeley

Department of Sociology and Social Services (Undergraduate)

Department of Sociology and Social Services

College of Letters, Arts, and Social Sciences

Office: Meiklejohn Hall 3095

Phone: (510) 885-3173

Website: <http://csueastbay.edu/sociology>

Professors

Patricia Jennings (Chair), Ph.D. University of Kentucky

Efren N. Padilla, Ph.D. Michigan State University

Carl Stempel, Ph.D. University of Oregon

Associate Professors

Will L. Johnson, Ph.D. University of California, Berkeley

Holly Vugia, Ph.D. University of California, Berkeley

Assistant Professors

Duke Austin, Ph.D. University of Colorado at Boulder

Ceaser Donovan, Ph.D. Louisiana State University

Sukari Ivester, Ph.D. University of Chicago

Department of Sociology and Social Services (Graduate)

Department of Sociology and Social Services

College of Letters, Arts, and Social Sciences

Office: Meiklejohn Hall 3095

Phone: (510) 885-3173

Website: <http://csueastbay.edu/sociology>

Professors

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Efren N. Padilla, Ph.D. Michigan State University

Carl Stempel, Ph.D. University of Oregon

Associate Professors

Will L. Johnson, Ph.D. University of California, Berkeley

Holly Vugia, Ph.D. University of California, Berkeley

Assistant Professors

Duke Austin, Ph.D. University of Colorado at Boulder

Ceaser Donovan, Ph.D. Louisiana State University

Sukari Ivester, Ph.D. University of Chicago

Graduate Advisor: Patricia Jennings

School of Arts and Media

Departments of Art, English, Communication, Theatre and Dance

College of Letters, Arts, and Social Sciences

Office: Robinson Hall 220

Phone: (510) 885-3118

Director, School of Arts and Media: Buddy James

Chair, Department of Art, Interim: Phillip Hofstetter

Chair, Department of Communication: Gale Young

Chair, Department of Music: John Eros

Chair, Department of Theatre and Dance: Thomas C. Hird

Director, Multimedia Graduate Program, Interim: Gwyan Rhabyt

Programs associated with the School of the Arts and Media fall within each Department. Programs that fall outside a specific department are listed below:

College of Science

California State University, East Bay

25800 Carlos Bee Blvd., NSC 131

Hayward, CA 94542
(510) 885-3441

<http://www20.csueastbay.edu/csci/index.html>

Office Hours: 8 a.m.-5 p.m., M-F

Advisors:

Bethany Villafuerte

Health Science and pre-nursing advising. bethany.villafuerte@csueastbay.edu

Jean Paul Nguyen

Health Science advising. jeanpaul.nguyen@csueastbay.edu

Mandeep Kaur

Biology, Chemistry, Biochemistry advising. mandeep.kaur@csueastbay.edu

Denise Wong

Coordinator and Counselor. denise.wong@csueastbay.edu

Michael Leung, Dean

Mission Statement:

The College of Science, by fostering an environment where students, faculty and staff work collaboratively to expand knowledge in the disciplines of science and mathematics, seeks to provide both majors and non-majors with a science foundation that is appropriate to their career goals and with knowledge and skills that will allow them to function as responsible and contributing members of society.

In support of its mission, the College of Science is committed to provide:

- A climate which encourages students, faculty, and staff to contribute to the intellectual, cultural, and economic life of the university and the communities it serves
- Academic programs that meet the evolving needs of its students and outreach programs that serve those within the primary service areas of the university
- Facilities and technology that support the learning environment
- A learning community which ensures students of varying age, ethnicity, culture and socio-economic status are equally well served
- An environment that fosters a lifetime of critical inquiry and learning

Institute for STEM Education

Visit the Institute for STEM Education Website

Center for Math Education and Research (CMER)

Our mission is to enhance and facilitate the teaching and learning of mathematics across all communities in the Bay Area. The Center is designed to benefit both faculty members, who are seeking opportunities for grant funding, and funders from outside granting agencies interested in participating in the improvement of mathematics education. CMER provides a centralized location that describes the work and expertise of the university faculty. CMER promotes opportunities for outside entities, who are interested in getting involved in community educational improvement, to collaborate with higher education faculty in Math and Education at Cal State University, East Bay.

Visit CMER website

CS Student Service Center

The Student Service Center serves College of Science students' who seeks help with selecting their classes, create an education plan, or major checks. The center serves students studying the following majors:

- Biology
- Chemistry
- Bio-Chemistry
- Health Science
- Pre-Nursing
- Statistics

College of Science Programs

ACCLAIM

Alameda County Collaborative for Learning and Instruction in Mathematics (ACCLAIM) is a regional initiative cosponsored by the California State University, East Bay (CSUEB) and the Alameda County Office of Education (ACOE), with the cooperation of local school districts.

East Bay Science Project

The mission of the Best Institute is to develop creative teacher exchange in diverse communities. We are a partnership of university faculty, in-service and pre-service teachers, and public school administrators. Our focus is on rigorous science content aligned with the California Science Content Standards. Our ongoing assistance will serve to support a pool of excellent teacher leaders who will carry their scientific and pedagogical expertise into their schools and to their students.

Biotechnology Program

The Biotechnology Certificate Program (BCP) was established at CSUEB in 1986 to meet the personnel requirements of the rapidly expanding Bay Area biotechnology industry.

Mental Health Workforce and Education Exchange

The Mental Health Workforce and Education Exchange at the California State University, East Bay is dedicated to providing information essential to building and sustaining a mental health workforce in the San Francisco Bay Area.

Pre-professional Health Academic Program, PHAP

The Pre-professional Health Academic Program operated by the College of Science provides a number of services to students of the University: general counseling about degree requirements, career choices, and personal decisions; assistance in selecting courses to meet admission requirements of the health professional schools; aid in preparation for national tests (such as DAT, GRE, and MCAT); information about health professional programs and careers in the health professions; aid in preparation of applications to professional schools; and submission of letters of evaluation in support of applications.

Department of Biological Sciences (Undergraduate)

Biological Science

Department of Biological Sciences

College of Science

Office: North Science 429

Phone: (510) 885-3471

Website: <http://www20.csueastbay.edu/csci/departments/biology/index.html>

Professors

Christoph W. Baysdorfer, Ph.D. University of California, Berkeley

Donald A. Gailey (Chair), Ph.D. University of California, Los Angeles

Michael S. Hedrick, Ph.D. University of British Columbia (Canada)

Christopher L. Kitting, Ph.D. Stanford University

Carol R. Lauzon, Ph.D. University of Vermont

Maria C. Nieto, Ph.D. University of California, Berkeley

Associate Professors

Maria E. Gallegos, Ph.D. University of Wisconsin, Madison

Caron Y. Inouye, Ph.D. University of California, Los Angeles

James Murray, Ph.D. University of Washington

Claudia Uhde-Stone, Ph.D. University of Bielefeld (Germany)

Erica L. Wildy, Ph.D. Oregon State University

Assistant Professors

Kenneth Curr, Ph.D. Albert Einstein College of Medicine, New York

Tyler Evans, Ph.D. University of Saskatchewan (Canada)

Nazzy Pakpour, Ph.D. University of Pennsylvania

Brian Perry, Ph.D. Harvard University

Department of Biological Sciences (Graduate)

Department of Biological Sciences

College of Science

Office: North Science 429

Phone: (510) 885-3471

Website: <http://www20.csueastbay.edu/csci/departments/biology/index.html>

Professors

Christoph W. Baysdorfer, Ph.D. University of California, Berkeley

Donald A. Gailey (Chair), Ph.D. University of California, Los Angeles

Michael S. Hedrick, Ph.D. University of British Columbia (Canada)

Christopher L. Kitting, Ph.D. Stanford University

Carol R. Lauzon, Ph.D. University of Vermont

Maria C. Nieto, Ph.D. University of California, Berkeley
Susan B. Opp, Ph.D. University of Massachusetts

Associate Professors

Maria E. Gallegos, Ph.D. University of Wisconsin, Madison
Caron Y. Inouye, Ph.D. University of California, Los Angeles
James Murray, Ph.D. University of Washington
Claudia Uhde-Stone, Ph.D. University of Bielefeld (Germany)
Erica L. Wildy, Ph.D. Oregon State University

Assistant Professors

Kenneth Curr, Ph.D. Albert Einstein College of Medicine, New York
Tyler Evans, Ph.D. University of Saskatchewan (Canada)

Nazzy Pakpour, Ph.D. University of Pennsylvania

Brian Perry, Ph.D. Harvard University

Graduate Coordinator: Maria C. Nieto

Marine Science

Moss Landing Marine Laboratories

Professors Emeriti

William Broenkow (Physical Oceanography)
Gregor M. Cailliet (Ichthyology)
Michael S. Foster (Phycology)
H. Gary Greene (Marine Geology)

Professors

Ivano W. Aiello (Geological Oceanography)
Kenneth H. Coale (Chemical Oceanography/Trace Metals)
Jon Geller (Invertebrate Zoology)
Michael H. Graham (Phycology)
Scott Hamilton (Ichthyology)
James T. Harvey (Interim Director, Vertebrate Ecology)
Erika McPhee-Shaw (Physical Oceanography)
Joan Parker (Research Librarian)
Diana Steller (Research Diving)
Nick Welschmeyer (Biological Oceanography)

Research Professors

Simona Bartl (Molecular Biology)
Laurence Breaker (Physical Oceanography)
David A. Ebert (Ecomorphology)
Stacy Kim (Benthic Ecology)
Valerie Loeb (Ichthyoplankton)
John Oliver (Benthic Ecology)
Jason Smith (Environmental Biotechnology Laboratory)
Richard M. Starr (C.A. Seagrant/Fisheries and Conservation Biology)

[Back to top](#)

Moss Landing Marine Laboratories

The California State University operates the Moss Landing Marine Laboratories (MLML) at Moss Landing on Monterey Bay, California. This facility functions as a seaside extension of the campuses of seven cooperating California State Universities (East Bay, Monterey Bay, San Jose, San Francisco, Sacramento, Stanislaus, and Fresno) and offers course work in marine biology, geology, oceanography, and other marine sciences.

Facilities

Since January 2000, the Laboratories have occupied new facilities in Moss Landing overlooking Monterey Bay, replacing the original laboratory demolished in the 1989 Loma Prieta earthquake. The stunning new building provides modern, up-to-date classrooms, laboratories, research facilities, library and conference room for faculty, staff and students of the consortium campuses.

MLML's Marine Operations Center, located also in Moss Landing, facilitates oceanographic and near-shore classes and research by providing shore support. The Center houses equipment used for in-port maintenance of scientific equipment, SCUBA air compressor, shore-based radio operations, and other support needs.

The MLML maintains a collection of nautical charts and topographical maps with an emphasis on the West Coast and there is a growing collection of reprints. It also subscribes to abstracting services such as "Oceanic Abstracts" and "Aquatic Sciences and Fisheries Abstracts." A terminal is available for computer literature searches. Close ties are maintained with libraries at Stanford's Hopkins Marine Station, U.C. Santa Cruz, Naval Postgraduate School, San Jose State University, and the Monterey Bay Aquarium Research Institute. Materials are borrowed from these agencies or further afield as the need arises. A special effort has been made to collect materials relating to Monterey Bay and Elkhorn Slough.

As a member of the Central California Oceanographic Cooperative (CENCAL), MLML operates the 135-foot Research Vessel Point Sur. The R/V Point Sur, built in 1981, is well-equipped for instructional use and research, with a trawl winch, two hydrographic winches and three laboratories, scientific equipment for sampling and oceanographic profiling, Smith-McIntyre grabs, rock dredges, and various types of coring devices. Also available is a variety of nets for bottom and midwater trawls.

The Laboratories also own and operate the 56-foot R/V John Martin and the 35-foot R/V Ed Ricketts. These boats are used for trawling, water sampling and other work near shore, and serve as diving platforms.

In addition, faculty and students at MLML utilize other University National Oceanographic Laboratory System (UNOLS) vessels when they have research requirements for larger vessels or for vessels in a different area of the world. MLML personnel have participated in cruises to Baja California, Hawaii, the Bahamas, Mexico, South America, the Arctic, and the Antarctic.

Graduate Program

A Master of Science in Marine Science degree program is offered at MLML for students from Cal State East Bay and the other consortium schools. Details of this program follow. In addition, graduate students from Cal State East Bay may take such courses at Moss Landing as are appropriate to their degree objectives, including that of an M.S. in Biological Science or an M.S. in Geology. (See the Biological Science and Geology chapters in the graduate section of this catalog.) A major part of the work leading to the M.S. degree in Biological Science, particularly in the environmental biology option, or to the M.S. degree in Geology, may be completed at the Marine Laboratories. Normally, a minimum of one or two quarters enrollment for other necessary courses on the Hayward campus may also be required.

Courses Offered

Full-time coursework and research in marine sciences are offered the year around. Emphasis in instruction and research is at the upper-division undergraduate and graduate levels. The Laboratories operate on a semester system during the academic year.

A total of thirty to forty units is offered each term in marine biological and physical sciences. Contact the Cal State East Bay Department of Biological Sciences for a current list of courses for the term you wish to attend, or you can write to Moss Landing Marine Labs, 8272 Moss Landing Road, Moss Landing, CA 95039. Basic courses offered every term include marine ecology, marine science diving, graduate seminar, and selected topics in marine sciences. See graduate course offerings listed at the end of this section. Also see Marine Science (MSC) undergraduate course listings in the Course Descriptions chapter of this catalog.

Nature of Instructional Program

Classes usually are small, with major emphasis upon field and laboratory instruction, and with a strong independent study or directed research component. Coursework usually is organized into large blocks of time (all day on a given day). Since field and laboratory activities are more demanding of time and energy than is usual for on-campus courses, the staff recommends that the student limit his or her academic load to twelve units. While it is possible to commute to Moss Landing for part-time work, this is not recommended because of the time and energy drain. In addition to standard course offerings, independent study (undergraduate) and graduate research and thesis work may be undertaken under supervision of staff members currently in residence.

Research Areas and Emphases at Moss Landing

Stress is upon field-oriented studies of marine and estuarine ecosystems, with physical science research concerned particularly with geological, chemical, and physical limiting factors, and biological investigations dealing with relationships of organisms to these factors. Where possible, physical and biological studies are paired to provide reciprocal benefits from a team approach and from interdisciplinary faculty sponsorship. The near-shore shallow waters of Monterey Bay, Elkhorn Slough, and the deep waters of the Monterey Submarine Canyon provide a wide diversity of habitats.

Housing in Moss Landing Area

Commercial housing (apartments, small furnished houses, rooms with or without board, etc.) is available at communities near Moss Landing (Castroville, Salinas, Watsonville, Aptos, Monterey). Short-distance commuting from these areas is necessary; thus, availability of a car or participation in a car pool usually is required.

Registration Procedures

Since MLML courses are offered on the semester system (fall and spring semesters), there are special registration procedures.

Students must complete and submit a "Space Reservation" form to MLML (available through the Cal State East Bay Department of Biological Sciences and through MLML). Permission must be given by Cal State East Bay Biological Sciences for East Bay MLML students to register online. Students must also attend the first day of classes at MLML.

Fall and spring registration for MLML courses is at the same time as Cal State East Bay's regular fall and spring registration. Fall registration fees are paid at the same time as regular fall registration fees. Spring registration fees must be paid at the beginning of spring semester MLML classes (end of January).

Department of Chemistry and Biochemistry (Undergraduate)

Department of Chemistry and Biochemistry

College of Science

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Website: <http://www20.csueastbay.edu/csci/departments/chemistry/index.html>

Professors

Michael Groziak, Ph.D. Northwestern University
Chul-Hyun Kim, Ph.D. University of California, Berkeley
Anne T. Kotchevar, Ph.D. University of Minnesota, Minneapolis
Michael K. K. Leung, Ph.D. University of Southern California

Associate Professors

Danika LeDuc, Ph.D. University of California, Berkeley
Ann A. McPartland (Chair), Ph.D. Purdue University
Monika Sommerhalter, Ph.D. Technische Universität Berlin

Assistant Professors

Patrick Fleming, Ph.D. The Ohio State University
Marlin Halim, Ph.D. Columbia University
Patrick Huang, Ph.D. University of California, Berkeley
Anthony Masiello, Ph.D. Oregon State University

Department of Chemistry and Biochemistry (Graduate)

Department of Chemistry and Biochemistry

College of Science

Office: North Science 431

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Website: <http://www20.csueastbay.edu/csci/departments/chemistry/index.html>

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Monika Sommerhalter, Ph.D. Technische Universität Berlin

Assistant Professors

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Patrick Huang, Ph.D. University of California, Berkeley
Anthony Masiello, Ph.D. Oregon State University

Graduate Coordinator: Chul-Hyun Kim

Department of Computer Science (Undergraduate)

Computer Science

Department of Computer Science

College of Science

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E-mail: mathcs@csueastbay.edu
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Student Service Center: North Science 335
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Istvan Simon, Ph.D. Stanford University
Ytha Y. Yu, Ph.D. University of California, Berkeley

Associate Professor Emeritus

Dan Jurca, Ph.D. Northwestern University

Professors

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Leann Christianson, Ph.D. University of South Carolina
Levent Ertaul, Ph.D. University of Sussex (United Kingdom)
Lynne L. Grewe, Ph.D. Purdue University
C. Matthew Johnson (Chair), Ph.D. College of William and Mary

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Farzan Roohparvar, Ph.D. Iowa State University
David Yang, Ph.D. Columbia University

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Jiaofei Zhong, Ph.D. The University of Texas at Dallas

Department of Computer Science (Graduate)

Computer Science

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College of Science

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Website: <http://www20.csueastbay.edu/csci/departments/math-cs/index.html>
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David Yang, Ph.D. Columbia University

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Graduate Coordinator: David Yang

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College of Science

Office: North Science 335

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E-mail: mathcs@csueastbay.edu

<http://www20.csueastbay.edu/csci/departments/math-cs/index.html>

Student Service Center: North Science 335

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Lynne L. Grewe, Ph.D. Purdue University
William Thibault, Ph.D. Georgia Institute of Technology

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Graduate Coordinator: Leann Christianson

Department of Earth and Environmental Sciences (Undergraduate)

Environmental Science

Department of Earth and Environmental Sciences

College of Science

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Phone: (510) 885-3486

Email: geology@csueastbay.edu

Website: <http://www20.csueastbay.edu/csci/departments/earth/index.html>amp;#160;

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James L. J. Houpis (Earth and Environmental Sciences), Ph.D. University of California, Berkeley
Michael Lee (Anthropology, Geography and Environmental Studies), Ph.D. London School of Economics (England)
Jeffery C. Seitz, (Earth and Environmental Sciences), Ph.D. Virginia Polytechnic Institute and State University

Associate Professors

Danika LeDuc (Chemistry and Biochemistry), Ph.D. University of California, Berkeley
Jean E. Moran (Earth and Environmental Sciences), Ph.D. University of Rochester
Luther M. Strayer (Earth and Environmental Sciences), Ph.D. University of Minnesota

Assistant Professor

Michael Massey, Ph.D. Stanford University

Environmental Science Program Coordinator: Michael Massey

Geology

Department of Earth and Environmental Sciences

College of Science

Office: North Science 329

Phone: (510) 885-3486

Email: geology@csueastbay.edu

Website: <http://www20.csueastbay.edu/csci/departments/earth/index.html>

Professor

Mitchell S. Craig (Chair), Ph.D. Georgia Institute of Technology
James L.J. Houpis, Ph.D. University of California, Berkeley
Jeffery C. Seitz, Ph.D. Virginia Polytechnic Institute and State University

Associate Professors

Jean Moran, Ph.D. University of Rochester
Luther M. Strayer, Ph.D. University of Minnesota

Assistant Professor

Michael Massey, Ph.D. Stanford University

Department of Earth and Environmental Sciences (Graduate)

Geology

Department of Earth and Environmental Sciences

College of Science

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Associate Professors

Jean Moran, Ph.D. University of Rochester
Luther M. Strayer, Ph.D. University of Minnesota

Assistant Professor

Michael Massey, Ph.D. Stanford University

Graduate Coordinator: Jean Moran

Marine Science

Moss Landing Marine Laboratories

Professors Emeriti

William Broenkow (Physical Oceanography)

Gregor M. Cailliet (Ichthyology)

Michael S. Foster (Phycology)

H. Gary Greene (Marine Geology)

Professors

Ivano W. Aiello (Geological Oceanography)

Kenneth H. Coale (Chemical Oceanography/Trace Metals)

Jon Geller (Invertebrate Zoology)

Michael H. Graham (Phycology)

Scott Hamilton (Ichthyology)

James T. Harvey (Interim Director, Vertebrate Ecology)

Erika McPhee-Shaw (Physical Oceanography)

Joan Parker (Research Librarian)

Diana Steller (Research Diving)

Nick Welschmeyer (Biological Oceanography)

Research Professors

Simona Bartl (Molecular Biology)

Laurence Breaker (Physical Oceanography)

David A. Ebert (Ecomorphology)

Stacy Kim (Benthic Ecology)

Valerie Loeb (Ichthyoplankton)

John Oliver (Benthic Ecology)

Jason Smith (Environmental Biotechnology Laboratory)

Richard M. Starr (C.A. Seagrant/Fisheries and Conservation Biology)

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Moss Landing Marine Laboratories

The California State University operates the Moss Landing Marine Laboratories (MLML) at Moss Landing on Monterey Bay, California. This facility functions as a seaside extension of the campuses of seven cooperating California State Universities (East Bay, Monterey Bay, San Jose, San Francisco, Sacramento, Stanislaus, and Fresno) and offers course work in marine biology, geology, oceanography, and other marine sciences.

Facilities

Since January 2000, the Laboratories have occupied new facilities in Moss Landing overlooking Monterey Bay, replacing the original laboratory demolished in the 1989 Loma Prieta earthquake. The stunning new building provides modern, up-to-date classrooms, laboratories, research facilities, library and conference room for faculty, staff and students of the consortium campuses.

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Department of Engineering (Undergraduate)

Engineering

Department of Engineering

College of Science

Office: Valley Business & Technology Center, Rm. VBT 346

Phone: (510) 885-2654

Website: www20.csueastbay.edu/csci/departments/engineering/

Professors

David Bowen, Ph.D. University of California, Berkeley

Saeid Motavalli (Chair), Ph.D. University of Pittsburgh

Zinovy Radovitsky (joint appointment in Engineering and Management), Ph.D. Scientific Research Institute of Labor, Moscow

Eric A. Suess (joint appointment in Engineering and Statistics), Ph.D. University of California, Davis

Helen Zong, Ph.D. University of Houston

Associate Professors

Farnaz Ganjeizadeh, Ph.D. University of Alabama at Huntsville
Farzad Shahbodaghlou, Ph.D. Purdue University

Assistant Professors

Reza Akhavian, Ph.D. University of Central Florida
Cristián Gaedicke, Ph.D. University of Illinois, Urbana-Champaign
Roger Doering, Ph.D. University of California, Berkeley
Howard H. Lei, Ph.D. University of California, Berkeley
James Tandon, Ph.D. University of California, Santa Barbara

Construction Management

Department of Engineering

College of Science

Office: VBT 346

Phone: (510) 885-2654

Website: <http://www20.csueastbay.edu/csci/departments/engineering/index.html>

Professor Emeritus

Christopher W. K. Lubwama (Accounting and Finance), Ph.D. Simon Fraser University (Canada)

Professors

David Bowen, Ph.D. University of California, Berkeley
Karina Garbesi (Anthropology, Geography and Environmental Studies), Ph.D. University of California, Berkeley
Saeid Motavalli (Chair), Ph.D. University of Pittsburgh
Tammie X. Simmons-Mosley (Accounting and Finance), Ph.D. University of Wisconsin-Madison
Helen Zong, Ph.D. University of Houston

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Farzad Shahbodaghlou, Ph.D. Purdue University

Assistant Professors

Cristian Gaedicke, Ph.D. University of Illinois Urbana Champaign
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Department of Engineering (Graduate)

Engineering Management

Department of Engineering

College of Science

Office: VBT 346

Phone: (510) 885-2654

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Construction Management

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Assistant Professors

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Department of Mathematics (Undergraduate)

Mathematics

Department of Mathematics

College of Science

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Student Service Center: North Science 337

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Professors

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Kathleen Hann, Ph.D. University of California, Davis
Gary E. Lippman, Ph.D. University of California, Riverside
Massoud Malek, Ph.D. University of Houston
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Shirley Yap, Ph.D. University of Pennsylvania

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Department of Nursing and Health Sciences (Undergraduate)

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College of Science

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Lindsay McCrea, Ph.D. University of California, San Francisco

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Matthew Moore, M.P.H. Tufts University

Arnab Mukherjea, Dr.P.H. University of California, Berkeley

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College of Science

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Derek Kimball, Ph.D. University of California, Berkeley

Assistant Professors

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Jennie Guzman, Ph.D. University of California, Berkeley
Ryan Smith, Ph.D. University of Colorado, Boulder

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Alan Monat, Ph.D. University of California, Berkeley
David A. Sandberg, Ph.D. Ohio University
Mary Kay Stevenson, Ph.D. University of South Carolina, Columbia

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David Fencsik (Chair), Ph.D. University of Michigan

Assistant Professors

Emily Cleveland, Ph.D. Clark University
Brian Gonsalves, Ph.D. Northwestern University
Murray Horne, Ph.D. Cardiff University (United Kingdom)
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Shenghua (Kelly) Fan, Ph.D. University of Minnesota
Joshua D. Kerr, Ph.D. University of California, Davis
YanYan Zhou, Ph.D. University of Maryland

Assistant Professor

Ayona Chatterjee, Ph.D. University of Edinburgh (United Kingdom)

Department of Statistics and Biostatistics (Graduate)

Statistics

Department of Statistics and Biostatistics
College of Science
Office: North Science 229
Phone: (510) 885-3435

Professors

Eric A. Suess (Chair), Ph.D. University of California, Davis
Mitchell R. Watnik, Ph.D. University of California, Davis

Associate Professors

Lynn Eudey, Ph.D. University of California, Berkeley
Shenghua (Kelly) Fan, Ph.D. University of Minnesota
Joshua D. Kerr, Ph.D. University of California, Davis
YanYan Zhou, Ph.D. University of Maryland

Assistant Professor

Ayona Chatterjee, Ph.D. University of Edinburgh (United Kingdom)

Graduate Coordinator: Lynn Eudey

Biostatistics

Department of Statistics and Biostatistics
College of Science
Office: North Science 229
Phone: (510) 885-3435

Professor

Eric A. Suess (Chair), Ph.D. University of California, Davis

Associate Professors

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Joshua D. Kerr, Ph.D. University of California, Davis
Mitchell R. Watnik, Ph.D. University of California, Davis
YanYan Zhou, Ph.D. University of Maryland

Assistant Professor

Ayona Chatterjee, Ph.D. University of Edinburgh

Graduate Coordinator: Shenghua (Kelly) Fan

College of Education and Allied Studies

California State University, East Bay

25800 Carlos Bee Blvd., AE 111
Hayward, Ca 94542

(510) 885-3942

<http://www20.csueastbay.edu/ceas/>

Office Hours: 8 a.m -5 p.m., M-F

Carolyn Nelson, Dean

Mission Statement:

The College of Education and Allied Studies (CEAS) is committed to "Preparing Leaders Committed to Social Justice and Democracy," a commitment reflected in our mission, values and goals. Our mission is "To prepare collaborative leaders, committed to professional excellence, social justice and democracy, who will influence a diverse and interconnected world." To develop such leaders, we seek and value the significant involvement of our partners from schools, business and community.

Credential Student Service Center

Location (Main Campus): AE 235

Phone: (510) 885-2272

Office Hours: Noon to 5 p.m., Monday - Thursday

Closed Fri, Weekends, Observed Holidays

<http://www20.csueastbay.edu/ceas/cssc/index.html>

Email: credentials@csueastbay.edu

The CSSC provides a range of services to those pursuing credentials, including:

- Advising regarding credential requirements in all programs;
- Screening for credential program requirements;
- Housing of student records;
- Monitoring of progress towards credentials;
- Verifying credential program completion;
- Making the official credential recommendation to the Commission on Teacher Credentialing (CTC).

Center for Sport and Social Justice

Visit the Center for Sport and Social Justice Website

Rita Liberti, Director

510.885.3050
rita.liberti@csueastbay.edu

Department of Educational Leadership (Graduate)

Department of Educational Leadership
College of Education and Allied Studies
Office: Art and Education Bldg. 250
Phone: (510) 885-4145
Website: <http://www20.csueastbay.edu/ceas/departments/el/index.html>

Professor Emerita

Emily Lowe Brizendine, Ed.D. University of California, Los Angeles

Professors

Gilberto Arriaza, Ph.D. University of California, Berkeley
Ray C. García (Chair), Ed.D. University of Houston
José A. López, Ph.D. University of North Texas
Peg Winkleman, Ph.D. University of California, Berkeley

Associate Professors

Barbara Plough, Ed.D. San Diego State University
Bradley Porfilio, Ph.D. State University of New York at Buffalo

Assistant Professor

Ardella J. Dailey, Ed.D. University of California, Berkeley

Kathryn Hayes, Ph.D. University of California, Davis

Kathryn Strom, Ed.D. Montclair State University

Department of Educational Psychology (Undergraduate)

Department of Educational Psychology
College of Education and Allied Studies
Office: Art and Education Bldg. 369
Phone: (510) 885-3011

Email: epsy@csueastbay.edu
Website: www20.csueastbay.edu/ceas/departments/epsy/index.html

Professors Emeriti

Jacki L. Anderson, Ph.D. University of Wisconsin
Rolla Lewis, Ed.D. University of San Francisco (FERP)

Professors

John M. Davis (Chair), Ph.D. University of California, Berkeley
Ann Halvorsen, Ed.D. University of California, Berkeley/San Francisco State University
R. Greg Jennings, Ph.D. University of California, Berkeley
Linda Smetana, Ed.D. Brigham Young University

Associate Professors

Randi Cowdery, Ph.D. Loma Linda University
Janet P. Logan, Ph.D. University of Wyoming
Terry Soo-Hoo, Ph.D. University of California, Berkeley
Oanh Kim Tran, Ph.D. University of Oregon

Liberal Studies, Special Education Option, B.A

The department offers the core requirements for the Special Education Option in Liberal Studies, Area VII (see the Liberal Studies section for a full description of the Liberal Studies major; see Educational Psychology in the graduate section for descriptions of 5000-level courses).

Core Requirements (16 units)

(See the Educational Psychology chapter in the graduate section of this catalog for course descriptions.)

EPSY 5021 Introduction to Educating all Students in Diverse Classrooms (4)

EPSY 5125 Educational Practices: Mild-Moderate Disabilities (4)

EPSY 5126 Special Education Law and Program Design (4)

EPSY 5136 Educational Practices: Moderate-Severe Disabilities (4)

While the department offers primarily graduate courses, it also offers the following courses for undergraduates who are interested in Counseling, Clinical Child Psychology, and Educational Psychology. Seniors interested in transitioning to a master's degree program in any of these areas may want to consider applying for graduate credit while still an undergraduate (see Baccalaureate Degree Requirements chapter). Courses listed at the 5000 and 6000 level under Educational Psychology in the Graduate section of this catalog may also be taken for graduate credit with the same approved petition, but instructor's approval is required prior to registration.

Department of Educational Psychology (Graduate)

Department of Educational Psychology
College of Education and Allied Studies
Office: Art and Education Bldg. 369
Phone: (510) 885-3011
Email: epsy@csueastbay.edu
Website: www20.csueastbay.edu/ceas/departments/epsy/index.html

Professors Emeriti

Jacki L. Anderson, Ph.D. University of Wisconsin
Rolla Lewis, Ed.D. University of San Francisco (FERP)

Professors

John M. Davis (Chair), Ph.D. University of California, Berkeley
Ann Halvorsen, Ed.D. University of California, Berkeley/San Francisco State University
R. Greg Jennings, Ph.D. University of California, Berkeley
Linda Smetana, Ed.D. Brigham Young University

Associate Professors

Randi Cowdery, Ph.D. Loma Linda University

Janet P. Logan, Ph.D. University of Wyoming
Terry Soo-Hoo, Ph.D. University of California, Berkeley
Oanh Kim Tran, Ph.D. University of Oregon

Graduate Coordinators:

M.S. in Special Education
Jacki L. Anderson (Moderate-Severe Disabilities)
Ann T. Halvorsen (Moderate-Severe Disabilities)
Linda Smetana (Mild-Moderate Disabilities)

M.S. Counseling
Clinical Child/School Psychology: Greg Jennings
Marriage and Family Therapy: Randi Cowdery
School Counseling, and Marriage, Family Therapy: Angela Tang, Interim

Department of Hospitality, Recreation and Tourism (Undergraduate)

Hospitality and Tourism

Department of Hospitality, Recreation and Tourism
College of Education and Allied Studies
Office: Kinesiology and Physical Education Bldg. 130
Phone: (510) 885-3043

Professors

Mary F. Fortune, Ed.D. University of San Francisco
Zaher Hallab, Ph.D. Virginia Polytechnic Institute and State University
Melany Spielman (Chair), Ph.D. University of Oregon
Doris D. Yates, Ph.D. Michigan State University

Associate Professors

Christopher Chamberlain, D.M. University of Phoenix
Nancy B. White, Ph.D. University of New Mexico

Assistant Professors

Thomas Padron, Ph.D. Capella University
Saehya Ann, Ph.D. Texas Tech University

Recreation

Department of Hospitality, Recreation and Tourism
College of Education and Allied Studies
Office: Kinesiology and Physical Education Bldg. 130
Phone: (510) 885-3043

Professors

Mary F. Fortune, Ed.D. University of San Francisco
Zaher Hallab, Ph.D. Virginia Polytechnic Institute and State University
Melany Spielman (Chair), Ph.D. University of Oregon
Doris D. Yates, Ph.D. Michigan State University

Associate Professors

Christopher Chamberlain, D.M. University of Phoenix
Nancy B. White, Ph.D. University of New Mexico

Assistant Professor

Thomas Padron, Ph.D. Capella University
Saehya Ann, Ph.D. Texas Tech University

Lecturers

Kenneth L. Hanley, M.S. California State University, Hayward
Margaret Zeiger, M.S., Golden Gate University
Janeen Hill, M.S., Guelph University
Lisa Smusz, M.F.T., California State University, East Bay
Erick Kong, M.S., California State University, East Bay

Department of Hospitality, Recreation and Tourism (Graduate)

Department of Hospitality, Recreation and Tourism
College of Education and Allied Studies
Office: Kinesiology and Physical Education Bldg. 130
Phone: (510) 885-3043

Professors

Mary F. Fortune, Ed.D. University of San Francisco
Zaher Hallab, Ph.D. Virginia Polytechnic Institute and State University
Melany Spielman (Chair), Ph.D. University of Oregon
Doris D. Yates, Ph.D. Michigan State University

Associate Professors

Christopher Chamberlain, D.M. University of Phoenix
Nancy B. White, Ph.D. University of New Mexico

Assistant Professor

Thomas Padron, Ph.D. Capella University
Saehya Ann, Ph.D. Texas Tech University

Department of Kinesiology (Undergraduate)

Kinesiology

Department of Kinesiology
College of Education and Allied Studies
Office: Physical Education Bldg. 130
Phone: (510) 885-3061
Website: www20.csueastbay.edu/ceas/departments/kin/index.html

Professors

Rebecca Beal, Ed.D. University of Northern Colorado
Paul Carpenter (Chair), Ph.D. University of California, Los Angeles
Rita M. Liberti, Ph.D. University of Iowa

Penny McCullagh, Ph.D. University of Wisconsin
Jeffery P. Simons, Ph.D. University of Illinois, Urbana-Champaign

Associate Professor

Catherine Inouye, Ed.D. University of Northern Colorado

Assistant Professors

Matthew Atencio, Ph.D. University of Wollongong (Australia)
ZáNean D. McClain, Ph.D. Oregon State University
My Phung (Jenny) O, Ph.D. University of Western Ontario (Canada)
Jennifer Sherwood, Ph.D. Marquette University
Elizabeth (Missy) Wright, Ph.D. Michigan State University
Vanessa R. Yingling, Ph.D. University of Waterloo (Canada)

Department of Kinesiology (Graduate)

Department Information

Department of Kinesiology

College of Education and Allied Studies

Office: Physical Education Bldg. 130

Phone: (510) 885-3061

Website: <http://www20.csueastbay.edu/ceas/departments/kin/index.html>

Professors

Rebecca Beal, Ed.D. University of Northern Colorado
Paul Carpenter (Chair), Ph.D. University of California, Los Angeles
Rita M. Liberti, Ph.D. University of Iowa
Penny McCullagh, Ph.D. University of Wisconsin
Jeffery P. Simons, Ph.D. University of Illinois, Urbana-Champaign

Associate Professor

Catherine Inouye, Ed.D. University of Northern Colorado

Assistant Professors

Matthew Atencio, Ph.D. University of Wollongong (Australia)
ZáNean D. McClain, Ph.D. Oregon State University
My Phung (Jenny) O, Ph.D. University of Western Ontario (Canada)
Jennifer Sherwood, Ph.D. Marquette University
Elizabeth (Missy) Wright, Ph.D. Michigan State University
Vanessa R. Yingling, Ph.D. University of Waterloo (Canada)

Graduate Coordinator: Catherine Inouye

Department of Teacher Education (Undergraduate)

Department of Teacher Education

College of Education and Allied Studies

Office: Art and Education Bldg. 242

Phone: (510) 885-3027 FAX: (510) 885-4632

Website: www20.csueastbay.edu/ceas/departments/ted/

Professors Emeriti

Joan D. Davenport, Ph.D. University of Pittsburgh
Phillip E. Duren, Ph.D. Ohio State University
James J. Zarrillo, Ph.D. Claremont Graduate School

Professors

Li-Ling Chen, Ph.D. University of Texas at Austin
Denise M. Fleming, Ph.D. University of California, Berkeley
Bijan B. Gillani, Ed.D. University of Southern California
Shira Lubliner, Ed.D. University of San Francisco
Carolyn Nelson, Ed.D. University of San Francisco
Lettie Ramirez, Ph.D. University of Texas at Austin

Associate Professors

Jeanette M. Bicais, Ph.D. University of California, Berkeley
Eric Engdahl (Interim Chair), Ph.D. University of California, Los Angeles
Valerie A. Helgren-Lempesis, Ed.D. University of Miami
James M. Mitchell, Ph.D. University of Minnesota, Minneapolis

Assistant Professors

Michele Korb, Ph.D. Marquette University
Julie McNamara, Ph.D. University of California, Berkeley
Diane Mukerjee, Ed.D. University of California, Berkeley
Mary Soto, Ed.D. University of Texas at Brownsville

General Information

The Department of Teacher Education offers primarily post-baccalaureate and graduate courses. See program listings for Teacher Education in the Programs of Study chapter.

Department of Teacher Education (Graduate)

Department of Teacher Education

College of Education and Allied Studies

Office: Art and Education Bldg. 242

Phone: (510) 885-3027, FAX: (510) 885-4632

Website: www20.csueastbay.edu/ceas/departments/ted/

Professors Emeriti

Joan D. Davenport, Ph.D. University of Pittsburgh
Phillip E. Duren, Ph.D. Ohio State University
James J. Zarrillo, Ph.D. Claremont Graduate School

Professors

Li-Ling Chen, Ph.D. University of Texas at Austin
Denise M. Fleming, Ph.D. University of California, Berkeley
Bijan B. Gillani, Ed.D. University of Southern California
Shira Lubliner, Ed.D. University of San Francisco
Carolyn Nelson, Ed.D. University of San Francisco
Lettie Ramirez, Ph.D. University of Texas at Austin

Associate Professors

Jeanette M. Bicais, Ph.D. University of California, Berkeley

Eric Engdahl (Interim Chair), Ph.D. University of California, Los Angeles
Valerie A. Helgren-Lempesis, Ed.D. University of Miami
James M. Mitchell, Ph.D. University of Minnesota, Minneapolis

Assistant Professors

Michele Korb, Ph.D. Marquette University
Julie McNamara, Ph.D. University of California, Berkeley
Diane Mukerjee, Ed.D. University of California, Berkeley
Mary Soto, Ed.D. University of Texas at Brownsville

General Information

The Department of Teacher Education offers post-baccalaureate and graduate programs to prepare teachers who are committed to improving school practices for California's diverse student populations and who can model such practices in their own classrooms.

Faculty

The Department of Teacher Education faculty is comprised of professors committed to preparing teachers and other educational professionals to be effective in California's diverse schools. The faculty have recognized expertise and are active in the professional discipline of Teacher Education. They are supplemented by a select group of lecturers drawn from respected universities and public schools in the Bay Area.

Programs Offered

Credentials:

- Multiple Subject*
- Single Subject*
- K-12 Reading Language Arts Specialist*

Degrees: Master of Science in Education

Options under M.S. in Education:

- Curriculum
- Early Childhood Education
- Educational Technology Leadership
- Reading Instruction

Certificates:

- Children's Literature
- Cross-Cultural, Language, and Academic Development (CLAD)
- Educational Technology Leadership

Authorization:

- Reading and Literacy Added Authorization

**Note:* The Multiple and Single Subject programs, and the programs in reading instruction are accredited by the California Commission on Teacher Credentialing (CCTC) and the National Council for the Accreditation of Teacher Education (NCATE).

Special Features

Credential Program Teams: All credential candidates become part of designated teams, each consisting of approximately 35 members. The team stays together for the full credential program, providing support and identity.

Field-Centered Credential Programs

Much of the program is conducted in public school settings. Student teaching/paid teaching occurs for three quarters, thereby integrating credential classes with real-life teaching experiences. Student teachers will be assigned to teaching experiences with children/young adults of racial, ethnic, or cultural backgrounds different from themselves.

The College of Education Credentials Student Service Center

The College of Education Credentials Student Service Center (CSSC) is provided as a service to all students and faculty involved in the credential programs. The CSSC provides the evaluations of coursework upon which the faculty make decisions as to the admission of an applicant to a program, as well as the recommendation for a credential upon a candidate's completion of a program.

Online Teaching and Learning Program

Department Information

College of Education and Allied Studies

Office: Arts and Education Bldg. 305

Phone: (510) 885-4496

Website: <http://www20.csueastbay.edu/ceas/departments/otl/index.html>

General Information

The **Interdisciplinary Studies Cluster** (College of Education and Allied Studies) program is built on the recognition that there are some issues that cross disciplines or professional areas within the College of Education and Allied Studies. It develops cross-disciplinary courses and experiences for students at the same time it provides a base for those subjects, programs, and faculty not currently embraced by any one department. It promotes interdisciplinary collaboration among students and faculty in the college, builds partnerships, and broadens program offerings for current and new students. By involving faculty from three or more departments in common endeavors, the Interdisciplinary Studies Cluster actively encourages cross-departmental renewal and innovation. The Cluster offers the M.S. in Education, Option in Online Teaching.

Academic Programs and Graduate Studies

California State University, East Bay

25800 Carlos Bee Blvd., SSA 4500

Hayward, CA 94542

Tel: (510) 885-3716

<http://www20.csueastbay.edu/academic/colleges-and-departments/apgs/index.html>

Donna Wiley, Interim Associate Vice President, APGS

The Offices of Academic Programs and Graduate Studies provides administrative leadership in developing and implementing academic policies for a broad range of degree programs and support services to better serve faculty, students, and staff.

Areas of responsibility and departments:

Office of Graduate Studies

Articulation

Catalog

Curriculum and Policies

General Education

Program for Accelerated College Education - PACE

Interdisciplinary Studies Major and Certificate

Student Grade Appeal and Academic Grievance

Testing Office

University Honors Program

University Thesis

**General Education: Interdisciplinary Studies and Special Certificates
(Undergraduate)**

General Studies

Academic Programs and Graduate Studies

General Education Office: Student Services and Administration Building, 1st Floor

Phone: (510) 885-2941

Director, Undergraduate Studies and General Education: Nancy M. Thompson (History), Ph.D. Stanford University

General Information

GS courses are interdisciplinary courses not housed in any department or college. They are primarily designed for General Education purposes.

Interdisciplinary Studies and Special Certificates (Undergraduate)

Academic Programs and Graduate Studies
Student Services and Administration Building, 4th Floor
Phone: (510) 885-3716

Important Notice: **The programs are currently undergoing review. Students interested in pursuing the Interdisciplinary Studies B.A. or B.S. or a Special Certificate should contact Linda Beebe in the General Education Office, SA 1500 for forms and information.**

Program Description

The purpose of the Interdisciplinary Studies Major and the Special Certificate programs is to allow students, with the advice and approval of knowledgeable faculty and administrators, to design their own academic programs tailored to their unique needs and interests.

At least two separate degree-granting programs must be involved. An undergraduate Interdisciplinary Studies Major must be approved no later than the time when the student has 60 quarter units of work remaining to complete for the degree, including at least 40 units in the Interdisciplinary Studies Major. This ensures that a significant portion of the program is planned in advance by the student and his/her faculty advisors. The diploma will read Interdisciplinary Studies Major In (program title).

The Interdisciplinary Studies Major program should not be seen as a device to avoid certain requirements of a regular major, nor as a means to gain admission to an impacted program. Likewise, an Interdisciplinary Studies Major cannot be developed in areas such as architecture, agriculture, and home economics where the campus currently lacks the necessary faculty expertise and physical facilities. Finally, an Interdisciplinary Studies Major is not a self-study, independent study, or external degree program.

Student Learning Outcomes

Because Interdisciplinary Studies Majors are individualized courses of study, student learning outcomes will be individually created for each student by the student's Interdisciplinary Studies Major Committee. The following student learning outcome, however, is common for all undergraduate Interdisciplinary Studies Majors:

- an Interdisciplinary Studies Major student will be able to approach an issue or problem from at least two disciplinary perspectives.

Major Requirements (B.A./B.S.)

The university offers both the B.A. and B.S. degrees with an Interdisciplinary Studies Major. There are no clearly defined differences between the two degrees, although B.S. degrees tend to be applied programs, while the B.A. is usually considered a liberal arts and social sciences degree. Normally, the type of degree awarded for an Interdisciplinary Studies Major reflects the degrees offered by the involved departments. To be eligible for an Interdisciplinary Studies Major, a student must have a cumulative GPA of at least 2.50. An Interdisciplinary Studies Major must be a coherent program organized around a sound academic theme. The title of an Interdisciplinary Studies Major should be short (three to five words) and should describe the central academic theme of the program, not the student's career objectives unless the two coincide.

An Interdisciplinary Studies Major must be fully approved before the student has fewer than 40 quarter units to complete the major and 60 for the degree. An Interdisciplinary Studies Major must contain at least 52 quarter units for the B.A. or 54 quarter units for the B.S. degree. The maximum number of quarter units for the Interdisciplinary Studies Major is 93 units for either the B.A. or the B.S., of which at least 36 are upper division (junior/senior level). Coursework in at least two different disciplines is

required. The B.A. and B.S. degrees with an Interdisciplinary Studies Major require a total of at least 180 units.

Courses in the Interdisciplinary Studies Major are not applicable to the General Education-Breadth Requirements. (However, previously completed transfer evaluations will not be reevaluated). A student can take courses for G.E. purposes in departments involved in the major. However, any individual course used for G.E. cannot also be used in the major, except for courses that are exempt under the G.E. policy. (See the B.A./ B.S. Degree Requirements chapter.). Only one course from a department involved in the major can be applied to G.E.

Procedure

A student who contemplates developing an Interdisciplinary Studies Major must have an overall and CSUEB grade point average of at least 2.50. Forethought and planning will need to precede any formal action. You may make an appointment to discuss all the necessary steps for getting your Interdisciplinary Studies major approved by emailing the Office of General Education A student who contemplates developing an Interdisciplinary Studies Major must have an overall and CSUEB grade point average of at least 2.50. Forethought and planning will need to precede any formal action. You may make an appointment to discuss all the necessary steps for getting your Interdisciplinary Studies major approved by emailing the Office of General Education at vicki.cosgrove@csueastbay.edu or call (510) 885-2941.

The prospective Interdisciplinary Studies Major student must prepare a one page prospectus of at least 200 words describing the theme or central academic focus of the proposed program (including the departments to be involved), the reasons why the objective cannot be fulfilled through a regular major, the academic and experiential background the student will bring to the program, the occupational goals of the student in relation to the proposal, the approximate time frame for completion of the major and the degree, and other pertinent information. A sample prospectus for a hypothetical Interdisciplinary Studies Major will be given to the student by the Interdisciplinary Studies Coordinator when they meet at the information appointment, which starts the process towards an approved Interdisciplinary Studies major. The student must also contact three faculty advisors in the involved departments, secure their support, and nominate them as his/her Interdisciplinary Studies Major committee. (One of these faculty advisors should be designated as chair of the committee.)

The prospectus, including the names of the three faculty advisors (and their departments), must be submitted to the Interdisciplinary Studies Major Coordinator in the Office of General Education before the student has fewer than 40 units left to complete in the proposed major and 60 units in the degree.

If the proposal is found academically sound and logistically feasible by the Interdisciplinary Studies Major Coordinator she will forward copies of it to the proposed faculty committee members along with an explanation of the Interdisciplinary Studies Major policies and procedures, copies of the student's transcripts, and a form for development and approval of the specific program of courses.

The three-person committee and the student must meet at a mutually acceptable time to design the program (i.e. to prepare the list of required and elective courses). When this is done, the form is completed, signatures of approval are affixed, and it is returned to the Interdisciplinary Studies Major Coordinator by the chair of the student's faculty committee. The Interdisciplinary Studies Major Coordinator circulates the proposal to the deans of the involved colleges for commentary. After reviewing any comments, the Senior Director of Undergraduate Studies and General Education will act on the proposal. If it is approved, a final copy is prepared and the coordinator and the student sign it. When the student comes in to sign and receive a copy, a "Change of Major/Minor/Option" form must also be signed. The student will also be informed of the college from which he/she will graduate.

General Education

All students must also complete the general education-breadth and other graduation requirements for the baccalaureate degree. Normally, courses used for the Interdisciplinary Studies Major cannot be used for G.E., but transfer G.E. evaluations will not be redone. Check your catalog or see an advisor at the University Advisement Center for more information.

Other Degree Requirements

In addition to major requirements, every student must also complete the University requirements for graduation that are described in the Baccalaureate Degree Requirements chapter in the front of this catalog. These include the General Education-Breadth requirements; the second composition (ENGL 1002) requirement; the cultural groups/women requirement; the performing arts/activities requirement; the U.S. history, U.S. Constitution, and California state and local government requirement; the University Writing Skills Requirement; and the residence, unit, and grade point average requirements.

Special Certificate

The purpose of a Special Certificate is to give the student an opportunity to design in advance, with university approval, a program that will be certified upon completion. To obtain an undergraduate Special Certificate, an undergraduate or graduate student must complete a program of at least 20 quarter-units in upper-division courses with a GPA of 2.00. The program must provide a logical and coherent pattern of preparation for a limited objective. The title of the proposed certificate should carry no connotation of meeting a licensing requirement for professional practice. The student's proposed program must be developed with, and approved by, a faculty member knowledgeable in the field being certified.

Note: To obtain a graduate Special Certificate, a graduate student must possess a bachelor's degree from an accredited institution and complete at least 20 quarter units, of which at least half must be at the graduate 6000-level, with a minimum GPA of 3.00. See the Interdisciplinary Studies Majors and Certificates chapter in the graduate section of this catalog for additional information.

Procedure

The student develops a proposed program with the advice and approval of a faculty member knowledgeable in the field of study. The advisor forwards the completed "Undergraduate/Graduate Special Certificate Proposal" (found at Certificate Information Sheet), to the dean of the college in which the preponderance of courses will be taken. If the dean approves, he or she signs and sends the proposal to the Interdisciplinary Studies Major Coordinator in the Office of General Education. The Interdisciplinary Studies Major Coordinator then sends a copy of the proposal to each of the other three college deans. The deans have 10 working days to enter an objection. If the Coordinator receives no objections, and the Undergraduate Dean judges the proposal to be sound, the program will be approved. If any college dean objects, he or she must file written objections with the Interdisciplinary Studies Major Coordinator within the 10 days. The Undergraduate Dean will consider the objections in deciding whether or not to approve the program. The Interdisciplinary Studies Major Coordinator will notify the student in writing about the final action on his/her proposal. A copy of an approved program is filed in the student's online file and in the Interdisciplinary Studies Major Coordinator's office. Upon completion of the Special Certificate program, the student applies to the Registrar and pays the fee to receive the certificate.

Interdisciplinary Studies Majors (Graduate)

Interdisciplinary Studies Majors and Special Certificates (Graduate)

**Academic Programs and Graduate Studies
Student Services and Administration Building, 4th Floor
Phone: (510) 885-3716, Fax: (510) 885-4777**

Professor

Jennifer L. Eagan, Ph.D. Duquesne University

Coordinator: Jennifer L. Eagan

Program Description

The purpose of the Interdisciplinary Studies Major and the Special Certificate programs is to allow students, with the advice and approval of knowledgeable faculty and administrators, to design their own academic programs tailored to their unique needs and interests.

At least two separate degree-granting programs must be involved. A graduate Interdisciplinary Studies Major must be approved no later than the time when the student has fewer than 32-39 quarter units to complete for the degree. This is to ensure that a significant portion of the program is planned in advance by the student and his/her faculty advisors, and that the residence requirement can be met. The diploma will read "Interdisciplinary Studies Major in (program title)."

The Interdisciplinary Studies Major program should not be seen as a device to avoid certain requirements of a regular major, nor as a means to gain admission to an impacted program. Likewise, an Interdisciplinary Studies Major cannot be developed in areas such as architecture, agriculture, and home economics where the campus currently lacks the necessary faculty expertise and physical facilities. Finally, an Interdisciplinary Studies Major is not a self-study, independent study, or external degree program.

Student Learning Outcomes

Because Interdisciplinary Studies Majors are individualized courses of study, student learning outcomes will be individually created for each student by the student's Interdisciplinary Studies Major Committee. All students, however, who graduate with an M.A. or M.S. Interdisciplinary Studies Major from Cal State East Bay will be able to: 1) approach an issue or problem from at least two disciplinary perspectives; and 2) demonstrate mastery of an interdisciplinary approach to an issue or problem in a capstone assignment (project, thesis, or comprehensive exam).

Major Requirements (M.A./M.S.)

The university offers the Interdisciplinary Studies Major program for both the M.A. and M.S. degrees. There is not a clear distinction between the two degrees so normally the decision about the assignment of an Interdisciplinary Studies Major reflects the type of degree offered by the departments involved. An Interdisciplinary Studies Major must be a coherent program of 45-52 units organized around a broad academic theme. The title should be short (three to five words) and should describe the central academic theme of the program and not the student's career objective unless the two coincide. A graduate Interdisciplinary Studies Major must be fully approved before the student has fewer than 32-39 quarter units to complete for the degree so the residence requirement can be met. (A maximum of 13 non-resident units is allowed.)

A department with a regular master's degree program (the sponsoring department) must certify that the prospective Interdisciplinary Studies Major student would be eligible for admission to its program as a "Conditionally Classified" or "Classified Graduate" student. (However, the student who obtains an approved Interdisciplinary Studies Major is not admitted to the regular graduate program, but to the Interdisciplinary Studies Major program under the Office of Academic Programs and Graduate Studies.)

A graduate Interdisciplinary Studies Major must consist of 45-52 quarter units of which at least half must be in graduate (6000-level) courses and at least 32-39 must be in residence in the program at Cal State East Bay. No more than 9 units may be in supervisory courses such as Independent Study, Project, Department or University Thesis, Field Work, Co-op Ed, and/or Internship. Graduate level courses in at least two different departments must be involved in the program. No course enrollment used in the Interdisciplinary Studies Major can be older than five years at the intended time of graduation. A 3.00 grade point average is required for completion of the graduate Interdisciplinary Studies Major. If a student has not satisfied the University Writing Skills requirement, admission is in "Conditionally Classified" status until the requirement is satisfied. For information on meeting the University Writing Skills Requirement, see the Testing Office website at www.csueastbay.edu/testing or call 510.885.3661.

A student is Advanced to Candidacy if, after completion of half the program, a 3.0 GPA is attained by a "Classified Graduate." Failure to achieve Candidacy will void the Interdisciplinary Studies Major contract. The student must comply with the standard master's degree requirements for all students listed in the Admission/Graduate chapter in this catalog.

Procedure

A student who contemplates developing an Interdisciplinary Studies Major must have an overall undergraduate and postbaccalaureate grade point average of at least 3.0 ("B," Adequate). Forethought and planning will need to precede any formal action. You may make an appointment to discuss all the necessary steps for getting your Interdisciplinary Studies major approved by emailing the Graduate Interdisciplinary Studies Coordinator at jennifer.eagan@csueastbay.edu.

The prospective Interdisciplinary Studies Major student must prepare a one-page prospectus of at least 200 words describing the theme or central academic focus of the proposed program (including the departments to be involved), the reasons why the objective cannot be fulfilled through a regular master's degree program, the academic and experiential background the student will bring to the program, the occupational goals of the student in relation to the proposal, the approximate time frame for completion of the degree, and other pertinent information. A sample prospectus for a hypothetical Interdisciplinary Studies Major will be given to the student by the Graduate Interdisciplinary Studies Coordinator when they meet at the information appointment, which starts the process towards an approved Interdisciplinary Studies major. The student must also contact three faculty advisors in the involved departments, secure their support, and nominate them as his/her Interdisciplinary Studies Major committee. (One of these faculty members should be designated as chair of the committee.)

The prospectus and the names of the sponsoring department chair and three faculty advisors (and their departments) must be submitted to the Graduate Interdisciplinary Studies Coordinator.

If the proposal is found academically sound and logistically feasible by the Senior Director of Graduate Studies and Academic Programs, the Graduate Interdisciplinary Studies Coordinator will forward copies of it to the proposed faculty committee members along with an explanation of the Interdisciplinary Studies Major policies and procedures, copies of the student's transcripts, and a form for development and approval of the specific program of courses. At that time, the student will be instructed to submit a paper graduate application to the University to the Graduate Admissions Office.

The three-person committee and the student must meet at a mutually acceptable time to design the program (i.e., to prepare the list of required and elective courses and to determine the appropriate culminating experience). When this is done, the form is completed, signatures of approval are affixed, and it is returned to the Graduate Interdisciplinary Studies Coordinator by the committee chair.

The Senior Director of Graduate Studies will review the proposal and, if it satisfies university requirements, the coordinator will send a copy to the dean of each college in which the student will be taking courses. The Senior Director of Graduate Studies will also designate the college from which the student is to graduate. The college deans will have ten working days (two weeks) to enter any objections. If none is received, the Senior Director of Graduate Studies will act on the proposal. If an objection is received, the Senior Director of Graduate Studies will hold the proposal pending resolution by the college dean, committee, and the student.

When the proposed program has been approved by the Associate Vice President, a final copy will be prepared in the Office of Academic Programs and Graduate Studies, the student and the Graduate Interdisciplinary Studies Coordinator will sign it, and copies will be distributed. The student will receive a copy of his/her approved Interdisciplinary Studies Major program at this time.

If any alterations of the approved program are necessary, the student emails the Graduate Interdisciplinary Studies Coordinator to initiate a "Change in Interdisciplinary Studies Major Requirements" form with the chair of his/her faculty advisory committee. A petition must be approved by the advisor (committee chair), the dean of the college from which the student will graduate, and the Graduate Interdisciplinary Studies Coordinator. Upon completion of 23 units with a 3.00 GPA and satisfaction of the University Writing Skills Requirement, a "Classified Graduate" student should request the committee chair to submit a "Change in Graduate Status" form to the Registrar's Office.

The Interdisciplinary Studies Major student will file for graduation during the first two weeks of the quarter immediately preceding the final quarter before graduation. The graduation check for the Interdisciplinary Studies Major is performed by the Graduate Coordinator and submitted to the Graduation Evaluations section of the Planning, Enrollment Management, and Student Affairs Office.

A student who is writing a University Thesis should be aware of the thesis requirements and deadlines published in the Catalog and in the University Thesis Writing Guide (www.csueastbay.edu/thesiswritingguide). The University Thesis must be submitted to the Thesis Office in Academic Programs and Graduate Studies no later than three weeks before the end of the last quarter. In addition to the mandatory university copy and any personal copies, the student must order at least one bound copy of the thesis for the chair of his/her committee.

Special Certificates

A program leading to the award of a Special Certificate must consist of at least 20 quarter units of upper division and/or graduate courses. A minimum grade point average of 2.00 is required for all the courses comprising the Special Certificate program. The program must provide a logical and coherent pattern of preparation for a limited objective. The title of the proposed certificate should be brief (three to five words) and must carry no connotation of meeting a licensing requirement for professional practice.

Procedure

The following procedure applies to Special Certificate programs consisting largely of postbaccalaureate and/or graduate courses:

The student develops a proposed program with the advice and approval of a faculty member knowledgeable in the field of study. The completed "Undergraduate/Graduate Special Certificate Proposal" (found at Certificate Information Sheet), with advisor and student approval, is forwarded by the advisor to the dean of the college in which the preponderance of courses will be taken. If the dean approves, s(he) signs and sends the proposal to the Graduate Interdisciplinary Studies Coordinator in the Office of Academic Programs and Graduate Studies. The coordinator then sends a copy of the proposal to each of the other three college deans.

The deans have ten working days to enter an objection. If none is received and the Senior Director of Graduate Studies judges the proposal to be sound, the program will be approved. If any college dean objects, s(he) must file written objections with the Graduate Interdisciplinary Studies Coordinator within the ten days. These will be considered by the Senior Director of Graduate Studies in deciding whether or not to approve the program.

The student is notified in writing by the Graduate Interdisciplinary Studies Coordinator as to the final action on his/her proposal. A copy of an approved program is filed in the student's on-line file and in the Interdisciplinary Studies Major Coordinator's office. Upon completion of the Special Certificate program, the student applies to the Registrar's Office and pays the required fee to receive the certificate.

Program for Accelerated College Education (PACE)

Program for Accelerated College Education
Academic Programs and Graduate Studies/Academic Advising and Career Education
Student Services and Administration Building

PACE Office: SA 2300, 2nd Floor (located inside Academic Advising and Career Education)

Phone: (510) 885-PACE (7223)

Fax: (510) 885-4785

Email: paceoffice@csueastbay.edu

Website: www.csueastbay.edu/pace

Academic Director: Donna Wiley

Program Coordinator: Shannon Coskran

Program Description

PACE is an innovative program which enables working adult students to make accelerated progress toward a Bachelor of Arts degree with a major in either Human Development or Liberal Studies. PACE classes are the same as those taken by students pursuing their degrees through the traditional university format. The only difference is the carefully structured course sequence which includes only courses in the evening, weekend and/or online, as well as the dedicated academic advising for PACE students. The PACE Program is also available at the Cal State East Bay Concord Campus.

Convenient Locations

- Hayward Hills Campus
- Concord Campus

Career Opportunities

Graduates in Human Development enjoy a wide variety of professional career opportunities. Among these are business, consulting, counseling and social services, probation/corrections, and education. The Human Development major is excellent preparation for graduate programs in law, counseling, social work, clinical psychology, public administration, and business administration.

Liberal Studies graduates go on to a broad range of careers and occupations in community services, business, government, early childhood education and the elementary (K-8) teaching profession. The Liberal Studies major is also excellent preparation for law school and graduate work in numerous fields such as public administration and education.

Features

PACE students are provided with a curriculum roadmap consisting of 12 to 13 units per quarter that allows them to complete their degree in two years. All classes are offered evenings, weekends, or online for the convenience of the working adult. The Human Development major can be fully completed online. PACE students also have access to intensive advising services in AACE, and are eligible to apply for the Bernard Osher Reentry Scholarship.

Students who come into the program with all entry requirements met, including sufficient transfer units, may complete the B.A. or B.S. in a minimum of seven quarters.

PACE Priority: Seating is reserved for PACE students in designated classes through the first pass of regular registration. PACE registration privileges only apply to the first pass of registration. Students placed on a waitlist for a course will be taken in the order in which they were placed on the waitlist. Also, students who miss the first class may be dropped.

Preparation

The best preparation for entry into the PACE Program is the completion of lower division General Education requirements. PACE welcomes inquiries from community college counselors and prospective students. Pre-admission advising for potential transfer students is available through pre-admission counselors at the Welcome Center. To schedule an appointment, call (510) 885-2256.

Specific PACE entry requirements are:

1. Acceptance for admission to Cal State East Bay must be completed before applying to the PACE program. For university admission information and criteria visit the Admission Office's website. To meet with a pre-admission counselor to find out if you meet the admission criteria or to learn more about the admission process, please visit their website.
2. Must be a newly admitted transfer student. PACE does not admit current students or a student that started at Cal State East Bay as a freshman.
3. Must be working at least 25 hours per week.

4. Must be 25 or older.
5. Must be willing to take a minimum of 8 units per quarter while enrolled at Cal State East Bay.
6. Lower division General Education course work must be completed for PACE admission. Please consult with a community college transfer advisor regarding CSU East Bay's lower division GE requirements.
7. Must pursue a major supported by PACE. **Currently PACE only supports Human Development and Liberal Studies majors.**

Students who have not completed the Cal State East Bay or PACE entry requirements are encouraged to do so, either at CSU East Bay or at their community college, and reapply.

Admission

Application to PACE is a two-step process. Prospective students must first apply to the university using the CSUMentor online application. Students must then complete the PACE application, which is available online from the PACE website, www.csueastbay.edu/pace.

PACE applicants are evaluated for acceptance into the PACE program after they are admitted to the university. Students will be notified of their acceptance into the program by email. Students are normally admitted to PACE in Fall Quarter each year due to the cohort nature of the program. However, students may apply for other quarters and will be accepted into the program on a space available basis. Students who have not completed the PACE entry requirements are encouraged to do so, either at Cal State East Bay or at their community college, and reapply to the program when they are completed.

Program Structure and Requirements

PACE students are provided with a program curriculum roadmap that provides a quarter-by-quarter schedule of their program's course offerings. Students are expected to follow the roadmap as closely as possible, taking a minimum of eight units each quarter, or risk being discontinued from the PACE program. These roadmaps are available on the PACE website.

Major Requirements

See the Human Development chapter or Liberal Studies chapter in the undergraduate section of the catalog.

University Library

California State University, East Bay

25800 Carlos Bee Blvd., LIBY

Hayward, CA 94542

Circulation: (510) 885-3612

Reference: (510) 885-3765, libhelp@csueastbay.edu

Administration: (510) 885-3664, libadmin@csueastbay.edu

<http://library.csueastbay.edu/>

John Wenzler, Dean of Libraries

Librarians

Linda S. Dobb, M.S. Simmons College; J.D. University of California, Hastings College of the Law
Liz Ginno (Library Faculty Chair), M.L.S. University of Washington, Seattle

Douglas B. Highsmith, M.S.L.S. University of Illinois, Urbana-Champaign; M.B.A. Northern Illinois University
Aline Soules, M.S.L.S. Wayne State University; M.A. University of Windsor; M.F.A. Antioch University, Los Angeles

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Kyzyl M. Fenno-Smith, M.L.S. University of Washington, Seattle
Sharon Radcliff, M.L.I.S. University of California, Berkeley
Diana Wakimoto, M.S.L.S., Simmons College; Ph.D. Queensland University of Technology (Australia)
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Lana Wood, M.S. Simmons College

Mission and Goals

University Libraries Mission Statement

The mission of the University Libraries at Cal State East Bay is to provide user-focused quality services and collections in support of undergraduate and graduate programs, faculty research, and the general information needs of the diverse community. The University Libraries provide access to recorded knowledge in all formats regardless of ownership. Consistent with the teaching mission of the university, the libraries assist students in becoming information competent, critical thinkers, and life-long learners. The University Libraries provide physical facilities to foster individual and collaborative teaching and learning and to encourage the exchange of ideas.

The Libraries' mission is accomplished through the following goals:

Goals

- Identify, acquire, organize, preserve, and provide access to pertinent recorded knowledge to support teaching, research, and creative activities.
- Develop and promote a comprehensive information literacy program that addresses specifically the Institutional Learning Outcomes of helping students locate, evaluate and use information appropriately.
- Provide an easily accessible, user-friendly and safe environment that fosters teaching and learning.
- Engage in outreach to the campus and wider communities to inform them about library resources and services, identify needed resources and services, and promote partnerships.
- Aspire to be a forward thinking, dynamic organization that is responsive and flexible in order to achieve its mission and goals.
- Continue to improve the library's effectiveness through systematic, on-going outcome assessment.

Grading and Academic Standards

These are university grading and academic standards which apply to all academic courses and programs offered at Cal State East Bay, including, but not limited to, courses offered in self-support, state-support or special sessions.

What is the grading policy at Cal State East Bay?

It is an integral part of the teaching responsibility of the faculty to provide careful evaluation and timely assignment of an appropriate grade to each enrolled student. There is a presumption that grades assigned are correct. It is the responsibility of anyone appealing an assigned grade to demonstrate otherwise. In the absence of compelling reasons, such as instructor or clerical error, prejudice, or capriciousness, the grade determined by the instructor of record is to be considered final. Final course grades must be submitted by the faculty to the Office of the Registrar by the established deadline. Also see "Policies and Procedures" in the Graduate Degree Information chapter.

If you believe that an appropriate grade has not been assigned, and you cannot resolve the matter informally with the instructor, department chair, and/or college dean/associate dean, you should present your case to the Presidential Appointee to the the Grade Appeal and Academic Grievance (Grade Appeal) Committee, 510-885-3716, no later than one quarter after you received the grade. The Grade Appeal Committee may authorize a change of grade under certain circumstances (see "What recourse do I have if I believe I have received a grade that is inappropriate?" in this chapter.). If the instructor of record does not assign a grade to an individual student, the appropriate failing grade for nonattendance ("WU" or "NC") is automatically recorded by the Office of the Registrar. You have one quarter to petition the Grade Appeal Committee if you believe the instructor should have assigned an academic grade. If the instructor of record is unable to assign course grades, the Grade Committee is authorized to ensure that other qualified faculty assign grades.

For purposes of correcting an error, an instructor may change a grade with approval of his/her department chair and college dean. No grade may be changed once graduation has been recorded unless an error has been made, in which case students have one term after their degree has been awarded to dispute the grade and have it corrected, or if a Grade Appeal petition has resulted in a grade change. The administrative symbol for withdrawal cannot be assigned by a faculty member. See the Registration chapter for the description of withdrawal policies and procedures.

What are the academic grading symbols for undergraduates, and what do they signify?

Academic Grading Symbols

Academic Symbols	Definitions	Grade (Quality) Points Earned
A	Excellent	4.0
A-	Excellent	3.7
B+	Good	3.3
B	Good	3.0
B-	Good	2.7
C+	Satisfactory	2.3

C	Satisfactory	2.0
C-	Satisfactory	1.7
D+	Poor	1.3
D	Poor	1.0
F	Failing	0.0
CR	Credit	0.0
NC	No Credit	0.0

"A-F" Grading Pattern

Courses required for your major in your major department are taken in this pattern. Specific department exemptions are noted in the course description. Faculty use of "+" or "-" is optional.

Credit/No Credit and A/B/C/No Credit Grading Patterns (CR/NC and A/B/C/NC)

You may enroll in up to 60 units in credit/no credit patterns as an undergraduate. There are two credit/no credit patterns: (1) "CR/NC," and (2) "A/B/C/NC." Some courses are only offered in the "CR/NC" or "A/B/C/NC" patterns. You can select the "CR/NC" pattern for most other courses subject to certain restrictions. You can choose the "CR/NC" pattern during Registration until the end of the Late Add period. No changes to, or from, the credit/no credit pattern are permitted after the Late Add period. There are no exceptions to this rule. No course in your major department, regardless of course prefix, may be taken "CR/NC," unless that is the only grading pattern in the course.

Units that you earn in courses taken under these grading patterns will apply to your degree requirements as long as they are not remedial courses (courses numbered 0800 - 0999). "CR" signifies you mastered the material at the level of "C-" or higher. "NC" signifies a work level of "D+" or lower. Faculty use of "+" or "-" is optional.

What are the administrative grading symbols, and what do they signify?

Administrative Grading Symbols

Administrative Grading Symbols	Definitions	Grade (Quality) Points Earned
RP	Report in Progress	0.0
I	Incomplete (Authorized)	0.0
IC	Incomplete Charged	0.0

RD	Report Delayed	0.0
W	Withdrawal	0.0
WU	Withdrawal Unauthorized	0.0
AU	Audit	0.0

Report in Progress (RP)

The symbol "RP," Report in Progress, is used in connection with courses that extend beyond an academic term. It indicates that work is in progress, but that a final grade cannot be assigned until additional work is completed. The work is to be completed within one year, except in the case of graduate theses or dissertation. A graduate thesis or dissertation must be completed and approved within five years of the student's initial enrollment in a thesis or dissertation course. If the work is not completed within the established time limit (one year, and for graduate theses and dissertation, five years), the "RP" grade will be changed to an "F" or "NC," depending on the grading pattern of the course.

Incomplete (I)

The symbol "I", Incomplete (Authorized), indicates that (1) a discreet portion of the required coursework has not been completed and evaluated in the prescribed time period due to unforeseen, but fully justified, reasons, (2) attending a future offering of the class is not required to complete the work, and (3) the instructor believes it likely that the student will earn credit for the course upon completion of that work. Students who are currently failing a course are not eligible for an Incomplete. It is the student's responsibility to bring pertinent information to the attention of the instructor and to determine from the instructor the remaining course requirements that must be satisfied to remove the Incomplete. A final grade is assigned when the work agreed upon has been completed and evaluated. The instructor will specify the work needed for completion which can be viewed in MyCSUEB.

An "I" must normally be made up within one calendar year immediately following the end of the term during which it was assigned. This limitation prevails whether or not the student maintains continuous enrollment. Students may not repeat a course in which they currently have an incomplete grade.

When the required work has been completed and evaluated, the instructor will submit a change of grade form and the academic grade will be recorded. If students do not complete the work within the allowed time limit, the grade will be recorded as an "IC" (Incomplete Charged).

Incomplete Charged (IC)

The symbol "IC," Incomplete Charged, is used if the student received an authorized incomplete ("I"), but did not complete the required coursework within the allowed time limit, and the original grading pattern of the course was "A-F." The "IC" replaces the "I" and is counted as a failing grade for computing grade point average. Students may be able to receive up to two one-quarter extensions from the instructor. These extensions are for cause and must be approved by both the instructor and department chair. (Examples of cause include military service, serious health or personal problems, or instructor's leave of absence.) If students want credit for a course after an "I" has been converted to an "IC," they must re-register and pass the course.

Students can graduate with an "I" grade on their record if the course is not necessary for graduation requirements. No grade may be changed once the degree has been awarded.

Report Delayed (RD)

Students will be assigned this administrative grade for a course if the instructor notifies the Office of the Registrar that grade reports have been delayed by circumstances beyond his or her control. An example is the illness of the instructor at the end of the quarter. The instructor will replace the "RD" grade with an academic grade as soon as possible. If the instructor fails to replace it with an academic grade by the end of the following term, the grade "RD" will be converted to a "WU" or an "NC" depending on your grading pattern.

Withdrawal (W)

This administrative grade indicates that the student was permitted to withdraw from a course after the end of the Drop period with the approval of the instructor and department chair. The requests and approvals shall state the reasons for withdrawal. This grade does not reflect the quality of performance and is not used in calculating grade point average. The instructor is urged to provide the student with a mechanism to evaluate their progress in the course during the first two weeks so that they can make an informed decision regarding their continued enrollment before the beginning of the withdrawal period.

Undergraduate students may withdraw from no more than 28 quarter units in the undergraduate career. Only withdrawals recorded in terms beginning with Fall 2009 are counted. Open University units are counted toward the maximum units. Students who have reached the limit on withdrawals may file an academic petition to allow additional withdrawals from courses. No limitations are placed on withdrawals by post-baccalaureate students taking classes in a post-baccalaureate career.

Withdrawal after the seventh week is normally not permitted. If students have attended the class, done the work, and have a valid reason for failing to complete the course, their instructor should normally assign the "I," Incomplete (Authorized) grade.

Withdrawal from a class after the seventh week requires a petition including verification of the reason by an impartial third party, written on letterhead, and signature of the instructor, department chair, and college dean. The requirements for withdrawal from the university from the third through the seventh weeks must also be fulfilled. Petitions are then reviewed by the Registration and Records Appeals Committee, approval is not automatic.

Students may not withdraw if they have taken the final examination or completed all course requirements.

If students do not attend class and do not have an approved withdrawal petition, they will receive a failing grade of "WU" or "NC," depending on the grading pattern selected for the course.

Details on the withdrawal process are documented in the Registration chapter.

Withdrawal Unauthorized (WU)

This administrative grade indicates that students enrolled in a course, but did not withdraw from the course and also failed to complete course requirements. It is used when, in the opinion of the instructor, completed assignments or course activities, or both, were insufficient to make normal evaluation of academic performance possible. The "WU" is calculated in the grade point average as an "F" grade.

Audit (AU)

Students may take courses for instruction only (Audit), and will attend class but will not receive credit. Audit students will pay the same fees and enjoy the same instructional privileges as students enrolled for credit. Audit students may participate in class, take examinations or complete other assignments, but are not required to do so.

Students may not petition to change their enrollment status from, or to, "Audit" after the Late Add period has ended.

Details on the audit process are covered in the Registration chapter.

How is my grade point average (GPA) computed?

Grade Point Averages and Their Significance

You earn grade (quality) points on the following basis:

- 4 quality points per unit of A,
- 3.7 quality points per unit of A-,
- 3.3 quality points per unit of B+,
- 3 quality points per unit of B,
- 2.7 quality points per unit of B-,
- 2.3 quality points per unit of C+,
- 2 quality points per unit of C,
- 1.7 quality points per unit of C-,
- 1.3 quality points per unit of D+, and 1 quality point per unit of D.
- A grade of "F" or "WU" earns no quality points.

Grade point average (GPA) is computed by dividing the total number of quality hours (units attempted), whether or not they were passed (but excluding "CR/NC" courses and those in which administrative grades were assigned except for the "WU"), into the number of quality (grade) points earned. A 2.00 (C) average in all college/university courses, all Cal State East Bay courses, and all major courses is required for a baccalaureate degree (excluding "CR," "NC," "W," and "AU" grades). All courses required by a major, including those in other departments, must be included in the calculation of the major GPA.

"CR" and "NC" grades and units are not included in the GPA calculation.

"RP" and "I" grades and units are not included in the GPA calculation. An "RP" or "I" grade becomes an "F" if the coursework is not completed in the specified time frame. The "F" will be included in the GPA calculation in the quarter in which the "RP" or "I" changes.

"WU" grades are regarded the same as "F's" in the GPA calculation.

"RD" grades and units are not included in the GPA.

"W" grades and units are not included in the GPA.

"RD" grades and units are not included in your GPA.

"W" grades and units are not included in your GPA.

When are final examinations scheduled?

Instructors will fully inform students of the manner of their evaluation as well as requirements and assignments. Typically, there will be periodic examinations, graded assignments, and a final examination. Final examinations are administered only during final exam week and only at the times scheduled by the university. Exceptions for compelling reasons are authorized in writing by the department chair with a copy to the college dean. The day and start time of the first lecture in the week determine the final examination time. Some courses contain a separate laboratory, activity, or discussion segment. Instructors may give a final examination on that segment during the last class meeting of that segment.

When will I receive my grades?

Grades for the current quarter are available online after the faculty submit their official grade rosters and grades are official. To check grades and academic standing visit MyCSUEB at: <https://my.csueastbay.edu>.

How can I qualify for the Dean's and Honors Lists?

Undergraduate students who achieve academic distinction in any academic quarter, as evidenced by a grade point average of 3.80 or higher in 12 units or more, in addition to any units graded CR/NC, will be included on the Dean's List for that quarter.

Students with a grade point average in the range of 3.60-3.79 will be included on the Honor's List for that quarter. Recognition of these honors will be posted to the student transcript for each quarter that the student is on the list.

Honors at Graduation is covered in detail in the Undergraduate Admission and Degree Information chapter.

What constitutes probation and disqualification?

The following policies govern undergraduate academic probation and disqualification:

Academic Probation

According to Title 5 of the California Code of Regulations, you must achieve at least a 2.00 grade point average (GPA) in all university work, all work at Cal State East Bay, and all work in your major to receive a baccalaureate degree. Academic probation warns you that your academic performance is below the state minimum required for graduation, and that you must improve your GPA before a degree can be granted.

There are various services to assist you in improving your academic standing. If you are an EXCEL or Educational Opportunity Program (EOP) student, you must contact your counselor. All other undergraduate students should contact the Academic Advising and Career Education office at 510-885-3621 and make an appointment to meet with an academic advisor.

When both your cumulative higher education GPA and your Cal State East Bay GPA reach 2.00, you are removed from academic probation.

Administrative Academic Probation

As authorized by Title 5 of the California Code of Regulations, you may be placed on administrative academic probation for:

- withdrawal or administrative disenrollment from all or a substantial portion of a program of studies in two successive quarters or in any three quarters. (Note: A student whose withdrawal is directly associated with a chronic or recurring medical condition or its treatment is not subject to administrative academic probation for such withdrawal);
- repeated failure to progress toward the stated degree objective or other program objective, including that resulting from the assignment of 23 units of "NC," when such failure appears to be due to circumstances within your control;
- failure to comply, after due notice, with an academic requirement or regulation, as defined by campus policy, which is routine for all students or a defined group of students, such as failure to complete the writing skills test, failure to complete a required practicum, failure to comply with professional standards appropriate to the field of study, or failure to complete a specified number of units as a condition for receiving student financial aid or making satisfactory progress in the academic program;
- earning only grades of "F," "NC," and/or "WU" for two consecutive quarters or any three quarters.

Academic Disqualification

As authorized by Title 5 of the California Code of Regulations, as an undergraduate student on academic probation you will be subject to academic disqualification when:

- as a freshman (fewer than 45 quarter hours of college work completed) you fall below a grade point average of 1.50 in all units attempted or in all units attempted at Cal State East Bay;
- as a sophomore (45 through 89 quarter hours of college work completed) you fall below a grade point average of 1.70 in all units attempted or in all units attempted at Cal State East Bay;
- as a junior (90 through 134 quarter hours of college work completed) you fall below a grade point average of 1.85 in all units attempted or in all units attempted at Cal State East Bay;
- as a senior (135 or more quarter hours of college work completed) you fall below a grade point average of 1.95 in all units attempted or in all units attempted at Cal State East Bay.

Administrative Academic Disqualification

As authorized by Title 5 of the California Code of Regulations, if you have been placed on administrative academic probation, you may be disqualified from further attendance if:

- the conditions for removal of administrative academic probation are not met within the period specified;
- you become subject to academic probation while on administrative academic probation;
- you become subject to administrative academic probation for the same or similar reason for which you have been placed on administrative academic probation previously, although not currently in such status.

If you are not on probation, you may be subject to administrative academic disqualification if:

- at the end of any term, you have a cumulative grade point average below 1.0;
- your cumulative grade point average is so low that in view of your overall educational record, it seems unlikely that the deficiency will be removed within a reasonable period.

How can I be readmitted as an undergraduate student after Academic Disqualification?

To be readmitted/reinstated as an undergraduate student following Academic Disqualification, you must have earned good grades at another accredited institution, or through Open University, have improved your CSUEB and cumulative GPA to 2.00 or better, and have completed any required remediation. Typically, you will not be considered for readmission for one year, certainly not for at least a quarter. If you are not admitted within three quarters, you must reapply for admission. (Please see the Graduate/Post-Baccalaureate Admission and Degree Information for information about graduate reinstatement.)

The Admissions Review Committee will decide on petitions for reinstatement, on a case-by-case basis, if you do not meet the above-mentioned criteria but feel you have compelling and/or extenuating circumstances which prevent you from achieving the reinstatement requirements. The committee may reinstate you on probation if, in their judgment, you are likely to remove any grade point average deficiencies within the subsequent two terms.

If you are readmitted/reinstated, you must maintain a minimum term GPA of 2.5.

If you are academically disqualified a second time, you will not be readmitted/reinstated a second time.

Can I qualify for Grade Forgiveness?

Grade Forgiveness is the process that matriculated students seeking a bachelor's degree follow, under limited circumstances, to remove the punitive effect of past academic failures. (A matriculated student is regularly enrolled after being admitted to the university.)

There are two ways to achieve Grade Forgiveness, Repetition of a Course and Forgiveness of Previous Term(s).

Repetition of Courses

You may repeat a course in which you have earned a grade of C-, D+, D, F, WU, NC, or IC for grade forgiveness two times, which means your earlier attempt(s) is ignored in GPA calculations, but not removed from your record, subject to the following conditions:

General Education course equivalencies:

Certain General Education courses are considered equivalent for the purposes of grade forgiveness. Therefore, students will receive credit for only one course in each of the following groups.

- ART 1010 - Introduction to World Art History *Units: 4*
- ART 1011
-
- BIOL 1000 - Basic Concepts in Biology *Units: 5*
- BIOL 1001 - Introduction to Biology *Units: 4*
- BIOL 1005 - How Things Work: The Human Body *Units: 4*
- BIOL 1007 - Human Biology *Units: 4*
-
- BIOL 1002 - Introduction to Biology Lab *Units: 1*
- BIOL 1004
-
- BIOL 2010 - Human Physiology and Anatomy I *Units: 5*
- BIOL 2011 - Anatomy and Physiology I *Units: 5*
-
- BIOL 2020 - Human Physiology and Anatomy II *Units: 5*
- BIOL 2021 - Anatomy and Physiology II *Units: 5*
-
- CHEM 1000 - Popular Topics in Chemistry *Units: 4*
- CHEM 2001
- CHEM 2002
-
- CHEM 1601 - Basic Chemistry for the Health Sciences *Units: 4*
- CHEM 1605 - Basic Chemistry for Healthier Living *Units: 4*
-
- CHEM 1610 Survey of Basic Chemistry for Health Sciences Units: 6
- CHEM 1615 Survey of Basic Chemistry for Healthier Living Units: 6

-
- DANC 1201 - Dance for All Bodies and Abilities *Units: 4*
- DANC 1202 - World Dance: Oral Traditions and the Stage *Units: 4*
- DANC 1203 - Exploring the Creative and Spiritual *Units: 4*
-
- ECON 1000 - Economics of Public Issues *Units: 4*
- ECON 1888
-
- ENSC 2800 - Environmental Problems of California *Units: 4*
- ENSC 2801 - Global Environmental Problems *Units: 4*
- ENSC 2802 - Global Environmental Issues *Units: 4*
-
- ENVT 2000 - Introduction to Environmental Studies *Units: 4*
- ENVT 2001 - Environmental Perspectives *Units: 4*
-
- ES 1002
- ES 2002
-
- GEOL 1001 - Introduction to the Earth Sciences *Units: 4*
- GEOL 1003 - How Earth Systems Work *Units: 4*
- GEOL 1005 - Earth Science *Units: 4*
- GEOL 1006 - Earth Systems and Energy *Units: 4*
-
- GEOL 2101 - Physical Geology *Units: 5*
-
- GEOL 2300 - Natural Disasters *Units: 4*
- GEOL 2301 - Natural Hazards *Units: 4*
-
- HIST 1014 - World Civilizations I *Units: 4*
- HIST 1017 - Ancient World Civilizations *Units: 4*
-
- HIST 1015 - World Civilizations II *Units: 4*
- HIST 2018
-
- HIST 1016 - World Civilizations III *Units: 4*
- HIST 2019
-
- HSC 1100 - Health: Maintenance of Wellness *Units: 4*
-

- KIN 1625 - Nutrition and Performance *Units: 4*
- KIN 1626 - Nutrition and Performance for Bodies at Play *Units: 4*
-
- KIN 2700 - Women and Sport *Units: 4*
- KIN 1888
-
- LIBY 1210 - Introduction to Information Literacy *Units: 2*
- LIBY 1551 - Information Skills in the Electronic Age *Units: 2*
-
- MUS 1000
-
- MUS 1004 - Introduction to World Music *Units: 4*
- *or*
- ANTH 1004
-
- MUS 1014 - Introduction to World Music History *Units: 4*
-
- MUS 1006 - History of Rock and Roll *Units: 4*
- MUS 2130
-
- PHIL 1102 - Issues in Environmental Ethics *Units: 4*
- PHIL 1103 - Science, Ethics, and Technology *Units: 4*
- PHIL 1104 - The Philosophy of Environmental Science and Policy *Units: 4*
-
- PHIL 1605
- PHIL 2605 - Introduction to Asian Religion *Units: 4*
-
- PHYS 1500 - How Things Work *Units: 4*
- PHYS 1700 - Elementary Physics *Units: 4*
-
- PHYS 1600
- PHYS 1800 - Astronomy *Units: 4*
-
- PSYC 1000 - General Psychology *Units: 5*
- PSYC 1001 - General Psychology and Society *Units: 5*
- PSYC 1005 - General Psychology for Healthier Living *Units: 5*
- PSYC 2004
- PSYC 2009
-

- SOC 1000 - Introduction to Sociology *Units: 4*
- SOC 1002 - Introduction to Sociology of Individual and Society *Units: 4*
-
- STAT 1000 - Elements of Probability and Statistics *Units: 5*
- STAT 2008
- STAT 2010 - Elements of Statistics for Business and Economics *Units: 5*
-
- THEA 1010
- THEA 1011
- THEA 1016 - All the World's a Stage: Theatre for Social Change *Units: 4*

You must file a "Petition for Grade Forgiveness" with the General Education Office, Room 1500, Student Services and Administration Building, if:

1. the course prefix and/or number has changed, or the course is Independent Study.
2. your first attempt was at another accredited post-secondary institution.

You pick up the petition in the department offering the course at Cal State East Bay. The chair of the department must certify that the courses are equivalent. (This means the course content is substantially identical. It does not mean merely that the courses meet the same requirement.) After the petition has been approved by the chair of the department offering the course, you must file it with the GE Director in the GE Office before the end of the Late Add period for that quarter. The GE Director must then approve your petition. A denied petition is promptly mailed to you by the GE Office. An approved petition is sent to the Office of the Registrar. The previous attempt will be excluded from your GPA calculations after the end of the quarter in which you repeat the course and may not be reflected in that quarter's grade report.

Note:

The CSU system normally forbids retroactive Grade Forgiveness. File your petition before reregistering for the course to give yourself time to adjust your program if your petition is denied.

Unit Limit on Grade Forgiveness.

Students are normally limited to 42 units, 24 of which will be forgiven and the additional 18 will be averaged.

1. You can only receive grade forgiveness for 24 units of coursework.
2. You may repeat an additional 18 units of coursework for grade averaging. The quality hours and quality points of the repeated courses will be averaged, while the units earned for these subsequent attempts will not be counted.
3. After completing the 42 units of grade forgiveness and grade averaging, students who require additional units may petition through their advisor (AACE, [EOP or EXCEL if member of program], GE, major). If the petition is approved, the GE Office will also decide if the additional units will be given grade forgiveness or grade averaging.

Grade Forgiveness is not possible in the following circumstances (except with approved petition):

1. You cannot repeat any one course for Grade Forgiveness, more than twice. (Some departments may restrict grade forgiveness to only one repeat.) If you do, the quality hours and quality points of all subsequent repeats will be averaged, while the units earned for these subsequent attempts will not be counted. These units will be counted as part of the 18-unit limit described in 2, above.

2. You cannot receive Grade Forgiveness for a grade of "C" (2.0) or better. If you do repeat a class in which your original grade was a "C" or higher, the quality hours and quality points of all attempts will be used to calculate your grade point average, while only the units earned for the first attempt will be counted. These units will be counted as part of the 18-unit limit described in 2, above.
3. Grade Forgiveness cannot be approved for any grade assigned as a result of academic dishonesty.
4. If the original grade(s) was assigned at Cal State East Bay, Grade Forgiveness by repeating a course at another institution is normally not possible. (Exceptions can be made for disqualified students who file an approved petition prior to repeating the course elsewhere, but only to the extent necessary for their readmission.) Disqualified students repeating courses through Open University at CSUEB, only to the extent necessary for their readmission, do not need to file a petition.

Cal State East Bay honors the Grade Forgiveness policies of other institutions as stated on their transcripts.

You should not file a "Petition for Grade Forgiveness" if the original grade is still an "I." You cannot get Grade Forgiveness because the "I" does not affect your GPA. If the grade has been changed to an "IC," Grade Forgiveness is possible.

Forgiveness of Previous Term(s)

Under the most extenuating circumstances, you can petition to exclude from degree requirements and GPA computations up to three quarters (or up to two semesters) of coursework taken at any institution. To have your petition approved, you must meet certain conditions and follow the process described below.

Approval of your petition requires satisfaction of all the following conditions:

- the coursework to be excluded does not represent your scholastic ability, and that this substandard performance was due to an extenuating circumstance;
- you would be compelled to complete additional courses or enroll in additional quarters to achieve your baccalaureate degree if your petition is not approved;
- five years have elapsed since the most recent coursework to be excluded was completed
- you completed at least 22 units at Cal State East Bay since the last term to be disregarded, with a 3.0 GPA, 45 units with a 2.5 GPA, or 67 units with a 2.0 GPA.

You must complete the following steps:

- complete your portion of the "Petition for Forgiveness of Previous Term"
- obtain your major advisor's approval on the petition
- file the petition in the Student Information Lobby. If you are eligible, the Appeals Coordinator certifies that you meet the above conditions, attaches a copy of your academic record, and forwards the package to the Grade Forgiveness committee in the Provost's Office. The committee acts upon all petitions by majority vote.

If the Appeals Coordinator determines you do not meet the conditions, you are notified and no action is taken.

Cal State East Bay honors the exclusion policies of the originating institution. Each term excluded by another institution reduces by one the number of terms that Cal State East Bay will consider for exclusion.

What recourse do I have if I believe I have received a grade that is inappropriate?

If you question the grade you received in a course, attempt to resolve the problem with your instructor. If you are not satisfied, discuss the issue with the chair of the department in which the course is offered. If the issue is not resolved, see the dean or associate dean of the college in which the course is offered. If all previous actions fail, contact the Presidential Appointee to the Grade Appeal and Academic Grievance Committee by calling 510-885-3716 (the Academic Programs and Graduate Studies Office). If you are a candidate for a degree, notify your graduation evaluator that a question is pending resolution. Remember, once your degree has been posted, no grade changes will be recorded.

Grade Appeal and Academic Grievance Committee

This is your recourse to resolve serious cases of alleged academic unfairness. After every effort by all parties to resolve the dispute has been ineffective, discuss your case with the President's appointee to the Grade Appeal Committee. The Presidential Appointee will assist you in exhausting all normal channels and, if necessary, in filing a Petition for a Grade Appeal Hearing. Submit your Petition and supporting documentation to the Academic Programs and Graduate Studies Office (Student Services and Administration Building). The Grade Appeal Committee will review your documentation and the response(s) filed by the other parties involved in the dispute. If the committee finds possible grounds for a grievance, a Hearing Panel will be convened to hear the case. Under normal circumstances, you must file your Petition before the end of the quarter following the quarter in which the alleged incident took place.

The Grade Appeal Committee is empowered to change a grade in accordance with the Grade Appeal Document and to assign a grade in cases where the instructor may have assigned an unfair academic grade. The Grade Appeal Committee is authorized to change a grade only after it has conducted a proper review of the case.

More information is available from the Office of Academic Programs and Graduate Studies (Student Services and Administration Building; Tel. 510-885-3716).

How does Cal State East Bay define and handle academic dishonesty?

Faculty members are expected to instill in their students a respect for integrity and a desire to behave honestly. Deception for individual gain is an offense against the members of the university community. To this end, faculty will take measures to discourage dishonesty, adjust grades appropriately if dishonesty is discovered, and recommend that additional administrative sanctions be considered. Grading policies are the exclusive prerogative of faculty. Non-academic administrative sanctions are the province of the Director or the Office of Student Conduct, Rights and Responsibilities. Telephone: (510) 885-3763.

Academic Dishonesty includes, but is not limited to:

- cheating, which includes possessing unauthorized sources of information during examinations, copying the work of others, permitting others to copy your work, submitting work done by others, completing assignments for others, altering work after grading and subsequently submitting it for re-grading, submitting the same work for two or more classes without the permission of all instructors involved, or retaining materials that you have been instructed to return to your instructor;
- plagiarism, which includes taking the words, ideas, or substance of another and either copying or paraphrasing the work without giving credit to the source through appropriate use of footnotes, quotation marks, or reference citations;
- providing materials to another with knowledge they will be improperly used;
- possessing another's work without permission;
- selling, purchasing, or trading materials for class assignments (includes purchasing term papers via the World Wide Web);
- altering the work of another;
- knowingly furnishing false or incomplete academic information;
- altering documents that make up part of the student record;
- forging signatures or falsifying information on any official academic document;
- inventing data or falsifying an account of the method through which data was generated.

If there is evidence of dishonesty:

- involving cheating: the student should be informed promptly, in private if possible, that he/she is suspected of cheating. If an exam is in progress, unauthorized materials should be confiscated, and the student allowed to finish. If relevant, the names of students in adjoining seats should be noted.
- involving plagiarism: your instructor should assemble documentation and notify you promptly in private.

Whenever dishonesty occurs, your instructor will take appropriate action and file an "Academic Dishonesty Incident Report" detailing the infraction and the action taken. The report will be filed in the Academic Affairs Office, per Executive Order 1073 with the Office of Student Conduct, Rights and Responsibilities, and you will receive a copy. The report will remain on file with the Academic Affairs Office for five years or until you graduate, whichever comes first.

Depending on the circumstances, you may: (a) be warned; (b) be required to resubmit work or retake an exam under specified conditions and with a possible grade penalty; (c) have your grade adjusted for the assignment; or (d) have your grade adjusted in the course, including assignment of an "F" at the discretion of the faculty. If the course grade is adjusted, it is not subject to Grade Forgiveness. See below for further administrative consequences.

You may appeal an instructor's action to the Grade Appeal Committee (see above). Your appeal of an instructor's academic sanction is governed by the "Grade Appeal and Grievance Document."

The instructor may also request that action be taken by the Office of Student Conduct, Rights and Responsibilities. (In any instance of academic dishonesty, however, whereby an academic sanction is imposed, the instructor will file an "Academic Dishonesty Incident Report." See three paragraphs above.) At the discretion of the Office of Student Conduct, Rights and Responsibilities, administrative sanctions such as warning, probation, suspension, or expulsion may be imposed. As prescribed in Executive Order 1043, Article V. Sanctions, paragraph E entitled Record Discipline, a record of disciplinary probation or suspension is entered on a student's transcript, with beginning and end date, for the duration of the sanction. A record of expulsion or suspension for one academic year or more shall note the effective date of discipline and remains on the transcript permanently, without exception. (If an appeal to the Grade Appeal Committee regarding an academic sanction imposed by the instructor is pending, action by the Office of Student Conduct, Rights and Responsibilities will be postponed until after the adjudication of the appeal.)

The complete text of Title 5, section 41301 of the California Code of Regulations and of Chancellor's Executive Order 1073 can be accessed on the website of the Office of Student Conduct, Rights and Responsibilities.

Student Financial Services

A variety of financial services are offered to students and staff, including cashier services, the sale of parking decals, and the processing of registration payments. The student financial services offices also assist students with their financial aid and scholarship payment disbursement questions, and accept authorizations to bill third party sponsors for student registration fees. The main office of Accounting and Fiscal Services is located in the Student Services and Administration building (SA), 2nd Floor. The Cashier's Office is located in the SA, 1st Floor and is open weekdays from 8:30 a.m. to 5:00 p.m., except Friday, the hours are 9:00 a.m. to 4:30 p.m. There is a secured drop box located in the front of the Cashiers' office for those wishing to drop off payments after normal business hours. *The Cashiers' office accepts checks, cash and money orders only. Credit cards are NOT accepted at the Cashiers' office;* however, students may pay their registration fees online with SmartPay using their American Express, Discover, Visa, or MasterCard with a 2.9% convenience fee. You may also choose to pay with an electronic check free of charge. Consult the online *Class Schedule* for additional payment information.

What undergraduate fees do I pay when I register at Cal State East Bay?

Schedule of Undergraduate Registration Fees

The CSU makes every effort to keep student costs to a minimum. Fees listed in published schedules or student accounts may need to be increased when public funding is inadequate. Therefore, CSU must reserve the right, even after fees are initially charged or initial fee payments are made, to increase or modify any listed fees. All listed fees, other than mandatory systemwide fees, are subject to change without notice, until the date when instruction for a particular semester or quarter has begun. All CSU listed fees should be regarded as *estimates* that are subject to change upon approval by The Board of Trustees, the Chancellor, or the Presidents as appropriate. Changes in mandatory systemwide fees will be made in accordance with the requirements of Working Families Student Fee Transparency and Accountability Act (Sections 66028 - 66028.6 of the Education Code.)

The following "Undergraduate Registration Fees" schedule reflects applicable systemwide fees and applies only to students who do not hold a bachelor's degree. If you already hold a bachelor's degree, regardless of your current educational objective, you will pay the fees listed in the Fees: Graduate section of the Admission/Graduate chapter.

All Students:

Application Fee (nonrefundable), payable by check or money order at the time application is made: \$55

Undergraduate Registration Fees, effective Fall 2014^{1,2}

	0.1 to 6.0 Units	6.1 or More Units
Tuition Fee*	\$1,058	\$1,824
Student Body Fee	43	43
Facilities Fee	2	2
University Union Fee	55	55
University Union Recreational Fee	65	65

Instructionally Related Activities Fee	8	8
Health Services Fee	75	75
Athletics Fee	35	35
Academic Excellence Fee	80	80
Photo I.D. (quarterly fee)	1	1
Total	\$1,422	\$2,188

**Note:* The Tuition Fee for the academic year (three quarters) is \$4,266 for 0.1 to 6.0 units a quarter and \$6,564 for 6.1 or more units a quarter. The total fees paid per quarter will be determined by the number of units taken, including those in excess of fifteen.

Mandatory systemwide fees are waived for individuals who qualify for such exemption under the provisions of the California Education Code. (See "Who qualifies for fee waivers?" in this chapter.)

How should I pay my fees?

Credit Cards, Cash, Check

You may use credit cards (American Express, Discover, Visa, and MasterCard), cash, or check for payment of registration fees. See the current *Class Schedule* for additional information.

Installment Payment Plans

Installment Payment Plans have been authorized if you are assessed Nonresident Tuition or Tuition Fees. See the current *Class Schedule* for additional information about payment plans.

Payment of Special Fees

The Cashier in the lobby of the Student Services and Administration building accepts in-person cash or check payments for all fees due to Cal State East Bay, such as registration, lab, breakage, test, and parking fees. (Most payments can also be mailed.)

For more information and important dates see the [Paying Your Fees](#) page.

What is Nonresident Tuition?

Nonresident Tuition (in addition to other fees charged to all students) per unit or fraction thereof is \$248.

Note: The total nonresident tuition paid per quarter will be determined by the number of units taken. Fees are subject to change without advance notice.

Mandatory systemwide fees are waived for those individuals who qualify for such exemption under the provisions of the California Education Code (see section on "Who qualifies for fee waivers").

How is residency for tuition purposes determined?

University requirements for establishing residency for tuition purposes are independent from those of other types of residency, such as for tax purposes, or other state or institutional residency. These regulations were established not to determine whether a student is a resident or nonresident of California, but rather to determine whether a student should pay tuition on an in-state or out-of-state basis. A resident for tuition purposes is someone who meets the requirements set forth in the Uniform Student Residency Requirements. These laws governing residency for tuition purposes at the California State University (CSU) are California Education Code sections 68000-68090, 68120-68134, and 89705-89707.5, and California Code of Regulations, Title 5, Subchapter 5, Article 4, sections 41900-41916. This material can be viewed on the Internet by accessing the CSU's website at www.calstate.edu/GC/resources.shtml.

The Office of Admission determines whether a student is a resident or nonresident for tuition purposes at the time of admission. This classification is based on information supplied by the student on the application for admission. A student who fails to submit adequate information to establish eligibility for resident classification will be classified as a nonresident.

Generally, establishing California residency for tuition purposes requires a combination of physical presence and intent to remain indefinitely. An adult who, at least 366 days prior to the residency determination date for the term in which enrollment is contemplated, can demonstrate physical presence in the state combined with evidence of intent to remain in California indefinitely, may establish California residency for tuition purposes. A minor normally derives residency from the parent(s) with whom he or she resides, or with whom he or she most recently resided.

Evidence demonstrating intent may vary from case to case, but will include, and is not limited to, the absence of residential ties to any other state, California voter registration and voting in California elections, maintaining California vehicle registration and driver's license, maintaining active California bank accounts, filing California income tax returns and listing a California address on federal tax returns, owning residential property or occupying or renting an apartment where permanent belongings are kept, maintaining active memberships in California professional or social organizations, and maintaining a permanent military address and home of record in California.

Nonresident students seeking reclassification are required to complete the Resident Reclassification Request Form which includes questions concerning their financial independence. Financial independence is required, along with physical presence and intent, to be eligible for reclassification. Financial independence is established if in the calendar year the reclassification application is made and in any of the three calendar years preceding the reclassification application the student:

- has not and will not be claimed as an exemption for state and federal tax purposes by his/her parent;
- has not and will not receive more than seven hundred and fifty dollars (\$750) per year in financial assistance from his/her parent; and
- has not lived and will not live longer than six (6) weeks in the home of his/her parent.

A nonresident student who has been appointed as a graduate student teaching assistant, a graduate student research assistant, or a graduate student teaching associate on any CSU campus and is employed on a 0.49 or more time basis is exempt from the financial independence requirement.

Non-citizens establish residency in the same manner as citizens, unless precluded by the Immigration and Nationality Act from establishing domicile in the United States.

Nonresident Tuition Exceptions

Exceptions to the general residency requirements are contained in California Education Code, Sections 68070-68084 and Title 5 of the *California Code of Regulations*, Subchapter 5, Article 4, Sections 41906-41906.5, and include, but are not limited to, members of the military and their dependents, certain credentialed employees of school districts and most students who have attended three or more years of high school in California and graduated from a California high school or attained the equivalent of a graduation. Whether an exception applies to a particular student cannot be determined before the submission of an application for admission and, as necessary, additional supporting documentation. (See the "Reclassification" section below.) Because neither campus nor Chancellor's Office staff may give advice on the application of these laws, applicants are strongly urged to carefully review the material and consult with a legal advisor.

Residency Determination Dates

The general rule is that a student must have been a California resident for at least one year immediately preceding the residency determination date in order to qualify as a "resident student" for tuition purposes. A residency determination date is set for each academic term and is the date from which residency is determined for that term.

The residency determination dates for quarter term campuses (Cal State East Bay) are:

- Fall: September 20
- Winter: January 5
- Spring: April 1
- Summer: July 1

The residency determination dates for the CalStateTEACH are as follows:

- Fall: September 20
- Spring: January 5
- Summer: June 1

Questions regarding residency determination dates should be directed to Cal State East Bay's Student Enrollment Information Center in the Student Services Building.

Campus Residency Classification Appeal

Students classified as non-residents may appeal a final campus decision within 120 days of notification by the campus. A campus residency classification appeal must be in writing and submitted to:

The California State University
Office of General Counsel
401 Golden Shore, 4th Floor
Long Beach, CA 90802-4210

The Office of General Counsel can either make a decision on the appeal or send the matter back to the campus for further review.

Students classified incorrectly as residents or incorrectly granted an exception from nonresident tuition are subject to reclassification as nonresidents and payment of nonresident tuition in arrears. If incorrect classification results from false or concealed facts, the student is also subject to discipline pursuant to Section 41301 of Title 5 of the *California Code of Regulations*.

Resident students who become nonresidents, or who no longer meet the criteria for an exception, must immediately notify the Admissions Office.

Changes may have been made in the rate of nonresident tuition and in the statutes and regulations governing residency for tuition purposes in California between the time this information is published and the relevant residency determination date. Students are urged to review the statutes and regulations stated above.

Am I responsible for other fees?

In addition to the fees required of all students, you may have to pay fees for the following items:

Miscellaneous Course Fees

You may have to pay a miscellaneous course fee for instructional materials and field trips for some courses. If courses have such fees, it is noted in their course descriptions in this catalog. Also refer to the *Class Schedule* for additional information and specific fee schedules for these courses

CSU reserves the right, even after initial fee payments are made, to increase or modify any listed fees, without notice, until the date when instruction for a particular quarter has begun. All CSU listed fees should be regarded as *estimates* that are subject to change upon approval by The Board of Trustees

Other Fees (payable when service is rendered)

Fee	Amount
Late registration fee	\$25
Failure to meet administratively-required time limit	\$20
Graduation and diploma fee	\$52
Lost ID card fee	\$10
Returned check	\$25
Parking fee per quarter: Auto	\$130
Parking fee per quarter: Motorcycle	\$65
Official transcript of record (single)	\$4
Additional transcripts prepared at same time up to ten (2-10)	\$2(each)
Additional transcripts prepared at same time after first ten (11+)	\$1(each)
Unofficial transcript of record	\$2(each)
Items lost or broken	COST
Test fees	COST
Laboratory and/or activity fee	COST
Certificate program fee	\$4
Entry Level Math (ELM) Exam	\$18
English Placement Test (EPT)	\$18
Writing Skills Test (WST)	\$25
Limited Administration of WST (guaranteed computer)	\$50

Miscellaneous Course fee

\$50-\$500

(Notes: The graduation fee does not include the cost of cap and gown rental.)

What are the fees for Continuing Education courses?

Nonresident Tuition is not charged for Continuing Education or Open University courses. Fees for Cal State East Bay Continuing Education courses vary, depending on the type of course selected. Visit the Continuing Education website at <http://www.ce.csueastbay.edu> for the latest information on fees for specific courses, as well as detailed descriptions of programs and courses.

Where can I get information on financial assistance?

The Office of Financial Aid, under the direction of Executive Director Rhonda C. Johnson, coordinates financial assistance for students at Cal State East Bay. The following information is available from the Enrollment Information Center in the first floor lobby of the Student Services and Administration building. Students may also call Financial Aid at (510) 885-2784.

1. A description of the federal, state, institutional, local, and private student financial assistance programs available to students who enroll at Cal State East Bay
2. For each aid program, a description of procedures and forms by which students apply for assistance, student eligibility requirements, criteria for selecting recipients from the group of eligible applicants, and criteria for determining the amount of a student's award
3. A description of the rights and responsibilities of students receiving financial assistance, including federal Title IV student assistance programs, and criteria for continued student eligibility under each program
4. The satisfactory academic progress standards that students must maintain for the purpose of receiving financial assistance and criteria by which a student who has failed to maintain satisfactory progress may reestablish eligibility for financial assistance
5. The method by which financial assistance disbursements will be made to students and the frequency of those disbursements
6. The terms of any loan received as part of the student's financial aid package, a sample loan repayment schedule, and the necessity for repaying loans
7. The general conditions and terms applicable to any employment provided as part of the student's financial aid package
8. The terms and conditions of the loans students receive under the Direct Loan and Perkins Loan Programs; and
9. The exit counseling information the school provides and collects for student borrowers.

Information concerning the cost of attending Cal State East Bay is available on the university website or by calling Financial Aid at (510) 885-2784, and includes tuition and fees; estimated costs of books and supplies; estimates of typical student room, board, and transportation costs; and, if requested, additional costs for specific programs.

What is the California State University's average support cost per full-time equivalent student?

Average Support Cost per Full-time Equivalent Student and Sources of Funding

The total support cost per full-time equivalent student (FTES) includes the expenditures for current operations, including payments made to students in the form of financial aid, and all fully reimbursed programs contained in state appropriations. The average support cost is determined by dividing the total cost by the number of FTES. The total CSU 2014/15 budget amounts were \$2,399,439,000 from state General Fund (GF) appropriations (not including GF debt service) and before adding \$71.1 million CalPERS retirement adjustment, \$1,592,256,000 from tuition fee revenue and after tuition fee discounts (forgone revenue), and \$453,018,000 from other fee revenues for a total of \$4,444,713,000. The 2014/15 resident FTES target is 346,050

and the nonresident FTES based on past-year actual is 15,568 for a total of 361,618 FTES. The GF appropriation is applicable to resident students only whereas fee revenues are collected from resident and nonresident students. FTES is determined by dividing the total academic student load (e.g. 15 units per semester) (the figure used here to define a full-time student's academic load).

The 2014/15 average support cost per FTES based on GF appropriation and net tuition fee revenue only is \$11,324 and when including all sources as indicated below is \$13,396, which includes all fee revenue (e.g. tuition fees, application fees, and other campus mandatory fees) and debt service in the CSU Operating Fund. Of this amount, the average net tuition and other fee revenue per FTES is \$5,643.

Sources of Funds and Average Cost per FTE Student

2014-2015	Amount	Average Cost per FTE Student	Percentage
State Appropriation (GF) ¹	2,399,439,000	6,934	51.8%
General Fund Debt Service ²	296,316,000	819	6.1%
Net Tuition Fee Revenues ³	1,592,256,000	4,390	32.8%
Other Fees Revenues ³	453,018,000	1,253	9.3%
Total Support Cost	4,741,029,000	13,396	100%

1. Represents state GF appropriation in the Budget Act of 2014/15; GF is divisible by resident students only (346,050 FTES).
2. A major change in the CSU budget appropriation beginning in 2014/15 is the fold in of state General Obligation bond debt service expense (\$197.2M) into the CSU main appropriation and movement of CSU lease revenue bonds debt service from a separately identified appropriations item to the CSU main appropriation item (\$99.1M).
3. Represents CSU Operating Fund, Tuition Fee and other fees revenue amounts (net of tuition fee discounts) submitted in campus August 2014/15 final budgets. Revenues are divisible by resident and nonresident students ((361,618 FTES).

The average CSU 2014/15 academic year, resident, undergraduate student basic tuition fee and other mandatory fees required to apply to, enroll in, or attend the university is \$6,759 (\$5,472 tuition fee plus \$1,287 average campus-based fees). However, the costs paid by individual students will vary depending on campus, program, and whether a student is part-time, full-time, resident, or nonresident.

Who qualifies for fee waivers?

The California Education Code includes provisions for the waiver of mandatory systemwide fees as follows:

Dependents of Deceased or Disabled Military Veterans; Congressional Medal of Honor Recipients or Dependents of Recipients

Section 66025.3. Qualifying children, spouses/registered domestic partners, or unmarried surviving spouses/registered domestic partners of a war period veteran of the U.S. military who is totally service-connected disabled or who died as a result of service-related causes; children of any veteran of the U.S. military who has a service-connected disability, was killed in action, or died of a service-connected disability and meets specified income provisions; any dependents or surviving spouse/registered domestic partner who has not remarried of a member of the California National Guard who in the line of duty and in active service of the state was killed or became permanently disabled or died of a disability as a result of an event while in active service of the state; and undergraduate students who are the recipient of or the child of a recipient of a Congressional Medal of Honor and meet

certain age and income restrictions. For further information, contact Enrollment Management to speak with a *Veterans' Affairs Benefits Specialist*.

Alan Pattee Scholarships

Section 68120. Qualifying children and surviving spouses/registered domestic partners of deceased public law enforcement or fire suppression employees who were California residents and who were killed in the course of active law enforcement or fire suppression duties (referred to as Alan Pattee Scholarships); and

Dependents of Individual Killed in September 11, 2001 Terrorist Attack

Section 68121. Qualifying students enrolled in an undergraduate program who are the surviving dependent of any individual killed in the September 11, 2001 terrorist attacks on the World Trade Center in New York City, the Pentagon building in Washington, D.C., or the crash of United Airlines Flight 93 in southwestern Pennsylvania, if the student meets the financial need requirements set forth in Section 69432.7 for the Cal Grant A Program and either the surviving dependent or the individual killed in the attacks was a resident of California on September 11, 2001. Students who may qualify for these benefits should contact the Admissions/Registrar's Office for further information and/or an eligibility determination.

Section 38130.5. Qualifying non-resident students exempt from paying nonresident tuition, such as, nonresident student with: high school attendance in California for three or more years; graduation from a California high school or attainment of equivalent; registration as an entering student at, or current enrollment at, an accredited institution of higher education in California not earlier than the fall semester or quarter of the 2001-02 academic year; in the case of a person without lawful immigration status, the filing of an affidavit with the institution of higher education stating that the student has filed an application to legalize his or her immigration status, or will file an application as soon as he or she is eligible to do so.

For Additional Information

Students who may qualify for any of these benefits listed above should contact Enrollment Management for further information on the specific requirements and/or an eligibility determination.

What are Cal State East Bay's refund policies?

Refund of Mandatory Fees, Including Nonresident Tuition

Regulations governing the refund of mandatory fees, including nonresident tuition, for students enrolling at the California State University are included in Section 41802 of Title 5, *California Code of Regulations*. For purposes of the refund policy, mandatory fees are defined as those systemwide and campus fees that are required to be paid in order to enroll in state-supported academic programs at the California State University. Refunds of fees and tuition charges for self-support, special session, and extended education programs or courses at the California State University are governed by a separate policy established by the University.

In order to receive a full refund of mandatory fees, including nonresident tuition, a student must cancel registration or drop all courses prior to the first day of instruction for the term. Information on procedures and deadlines for canceling registration and dropping classes is available *Class Schedule*.

For state-supported semesters, quarters, and non-standard terms or courses of four (4) weeks or more, a student who withdraws during the term in accordance with the university's established procedures will receive a refund of mandatory fees, including nonresident tuition, based on the portion of the term during which the student was enrolled. No student withdrawing after the 60 percent point in the term will be entitled to a refund of any mandatory fees or nonresident tuition.

For state-supported non-standard terms or courses of less than four (4) weeks, no refunds of mandatory fees and nonresident tuition will be made unless a student cancels registration or drops all classes prior to the first day in accordance with the university's established procedures and deadlines.

Students will also receive a refund of mandatory fees, including nonresident tuition, under the following circumstances:

- The fees were assessed or collected in error;
- The course for which the fees were assessed or collected was canceled by the university
- The university makes a delayed decision that the student was not eligible to enroll in the term for which mandatory fees were assessed and collected and the delayed decision was not due to incomplete or inaccurate information provided by the student;
- The student was activated for compulsory military service.

Students who are not entitled to a refund as described above may petition the university for a refund demonstrating exceptional circumstances and the chief financial officer of the university or designee may authorize a refund if he or she determines that the fees and tuition were not earned by the university.

Information concerning any aspect of the refund of fees may be obtained from the Cashiers Office, 1st Floor, Student Services and Administration Building, (510) 885-3865.

Refund Regulations

Refund disbursements are not made automatically. If you request a refund check (see below) and it is approved, it will be available in approximately four to six weeks.

If you are eligible for a refund of Registration fees (including nonresident tuition) because you withdrew or reduced units before the published deadlines, the amount of the refund will automatically be credited to your university account. If you take no action, the university will leave the balance on your account to apply toward future charges.

A few refund situations are listed below for your information.

- a. If you find it necessary to withdraw officially from Cal State East Bay, you may be eligible for a partial refund of your Registration fees. Also, see 3) below. A "Refund Request" form is available at the Cashier's on the first floor of Student Service Building or in the Concord Campus Academic Services Lobby.
- b. If you withdraw before the first day of instruction for the term, all quarterly fees, including the Facilities fee, Instructionally Related Activities fee, Associated Students fee, Health Services fee and University Union fee are refunded in full. A \$10.00 processing fee will be assessed if a refund check is generated. Information on procedures and deadlines for canceling registration and dropping classes is available in the *Class Schedule*. The Late Registration fee is not refundable except when due to university error.
- c. If you have been called to active military duty and, as a result, find it necessary to withdraw from Cal State East Bay, you are eligible for a refund of fees. You must file a "Refund Request" form available at the Cashier's on the first floor of Student Service Building with a copy of the orders.
- d. Refunds owed to financial aid recipients will be used to repay the funds from which the student has received financial aid.

Information concerning the refund policy of Cal State East Bay for the return of unearned tuition and fees or other refundable portions of costs is available from the Accounting and Fiscal Services Office, (510) 885-3767.

What is Cal State East Bay's policy regarding fees or debts owed to the institution?

Should a student or former student fail to pay a fee or a debt owed to Cal State East Bay, the institution may "withhold permission to register, to use facilities for which a fee is authorized to be charged, to receive services, materials, food or merchandise or any combination of the above from any person owing a debt" until the debt is paid (see Title 5, *California Code of Regulations*, Sections 42380 and 42381).

Prospective students who register for courses offered by the university are obligated for the payment of fees associated with registration for those courses. Failure to cancel registration in any course for an academic term prior to the first day of the academic term gives rise to an obligation to pay student fees, including any tuition, for the reservation of space in the course.

The institution may withhold permission to register or to receive official transcripts of grades or other services offered by the institution from anyone owing fees or another debt to the institution. The institution may also report the debt to a credit bureau, offset the amount due against any future state tax refunds due the student, refer the debt to an outside collection agency and/or charge the student actual and reasonable collection costs, including reasonable attorney fees if litigation is necessary, in collecting any amount not paid when due.

If a person believes he or she does not owe all or part of an asserted unpaid obligation, that person may contact the campus business office. The business office, or another office on campus to which the business office may refer the person, will review all pertinent information provided by the person and available to the campus and will advise the person of its conclusions.

What is the procedure for the establishment or abolishment of a student body fee?

The law governing The California State University provides that fees defined as mandatory, such as a *student body association fee* and a *student body center fee*, may be established. A *student body association fee* must be established upon a favorable vote of two-thirds of the students voting in an election held for this purpose (Education Code, Section 89300). The campus President may adjust the student body association fee only after the fee adjustment has been approved by a majority of students voting in a referendum established for that purpose. The required fee shall be subject to referendum at any time upon the presentation of a petition to the campus President containing the signatures of 10 percent of the regularly enrolled students at the University. Student body association fees support a variety of cultural and recreational programs, childcare centers, and special student support programs. A student body center fee may be established only after a fee referendum is held which approves by a two thirds favorable vote the establishment of the fee (Education Code, Section 89304). Once bonds are issued, authority to set and adjust student body center fees is governed by provisions of the State University Revenue Bond Act of 1947, including, but not limited to, Education Code sections 90012, 90027, and 90068.

The process to establish and adjust other campus-based mandatory fees requires consideration by the campus fee advisory committee and a student referendum. The campus president may use alternative consultation mechanisms if he/she determines that a referendum is not the best mechanism to achieve appropriate and meaningful consultation. Results of the referendum and the fee committee review are advisory to the campus president. The president may adjust campus-based mandatory fees, but must request the Chancellor establish a new mandatory fee. The President shall provide to the fee advisory committee a report of all campus-based mandatory fees. The campus shall report annually to the Chancellor a complete inventory of all campus-based mandatory fees.

For more information or questions, please contact the Budget Office in the CSU Chancellor's Office at (562) 951-4560.

Footnote

1. Fee adjustments subject to the policies established in Executive Order 661.
2. **Disclaimer - Cost of Collection: Unpaid Tuition and Fees.** You are subject to normal collection actions for unpaid debts including: assessment of late registration and past due fees, withholding of University services, withholding of credit for and disenrollment from some or all classes, referral of the debt to a collection agency and/or credit reporting agency, intercept of amounts due you from the State of California and/or legal action. You are obligated to pay all costs of collection, including attorney fees, collection agency fees and court costs (Please see Title 5, California Code of Regulations, Sections 42380 and 42381).

Registration

What general policies affect a student's enrollment at Cal State East Bay?

1. To enroll at Cal State East Bay, students must be admitted to the university.
2. Enrollment is complete only when all enrollment requests have been properly recorded and students have paid all fees, deposits, and charges. Dates for enrolling in MyCSUEB, the Cal State East Bay enrollment system, are published on the University Web site under Important Dates.
3. Students are given credit only for those courses in which they are officially enrolled in at the conclusion of the Late Add period, except for any course which they have officially filed a Withdrawal form(s) and received an approved withdrawal.
4. Students will be held responsible for completing all courses for which they are enrolled, except for those courses from which they withdrew.
5. If students enrolled in a course and do not attend initial class meetings, they may be dropped from the class if demand for the course exceeds capacity. Departments following this practice will make reasonable efforts to inform students of this action. Students should not assume, however, that non-attendance will result in them being automatically dropped.
6. The university does not guarantee the availability of particular courses or sections because admission to classes is authorized only until the maximum number of students allowable in any section has been reached.
7. Approved by the University Academic Senate, the priority for enrollment is as follows:
 - a. Students authorized to receive priority enrollment
 - b. Graduating undergraduate seniors and graduating graduate students (undergraduates who have filed for graduation and have 150 units completed, and graduate or doctoral students who have filed for graduation and/or have been advanced to candidacy by the faculty of the graduate program).
 - c. Students authorized to receive early enrollment.
 - d. Freshmen
 - e. Post-baccalaureate credential and doctoral students, and conditionally classified/classified graduate students in masters programs
 - f. Seniors
 - g. Juniors
 - h. Sophomores
 - i. Second baccalaureate, post-baccalaureate certificate program, and unclassified post-baccalaureate students
 - j. AB 386 Students (online students from other CSU Campuses).
8. The priority for enrollment for students enrolling in 6000-level and 8000-level courses is as follows:
 - a. All graduate students
 - b. Undergraduate students majoring in the department concerned
 - c. All other students
9. If a student or former student fails to pay a debt owed to Cal State East Bay, the university may "withhold permission to enroll, to use facilities for which a fee is authorized to be charged, to receive services, materials, food or merchandise or any combination of the above from any person owing a debt" until the debt is paid (see Sections 42380 and 42381 of Title 5, California Code of Regulations). For example, Cal State East Bay may withhold production of official transcripts of grades to any person owing a debt. If students believe that they do not owe all or part of an unpaid obligation, contact the Accounting Office. They will review the pertinent information, including information students may wish to present, and will advise students of their conclusions with respect to the debt. Students should check MyCSUEB (<https://my.csueastbay.edu>) on the university Web site to verify whether any holds exist that will block registration for the next or subsequent term.
10. *Health Requirements**
Entering CSU students are required to present proof of the following immunizations to the CSU campus they will be attending before the beginning of their first term of enrollment.

- a. *Measles and Rubella Immunization.* All new and readmitted students must provide proof of full immunization against measles and rubella prior to enrollment. *Failure to comply with this requirement will result in a hold being placed on the student's registration.*
- b. *Tuberculin Skin Test or Chest X-Ray.* International students must provide written proof of a Tuberculin Skin Test or chest x-ray performed in the U.S.A. during the past 12 months. *Failure to comply with this requirement will result in a hold being placed on the student's registration.*
- c. *Hepatitis B.* All new students who will be 18 years of age or younger at the start of their first term at a CSU campus must provide proof of full immunization against Hepatitis B before enrolling. Full immunization against Hepatitis B consists of three timed doses of vaccine over a minimum 4 to 6 months period. If students need further details or have special circumstances, please consult with Student Health and Counseling Services. Each incoming freshman who will be residing in on-campus housing will be required to return a form indicating that they have received information about Hepatitis B and the availability of the vaccine to prevent contracting the disease and indicating whether or not the student has chosen to receive the vaccination. These are not admission requirements, but are required of students as conditions of enrollment in CSU. *Failure to comply with this requirement will result in a hold being placed on the student's registration.* Hepatitis B immunization is available at Student Health and Counseling Services for no, or low cost. Call Student Health and Counseling Services at (510) 885-3735 for more information or to make an appointment. For convenience, a form is available online for students to download and complete. See the Student Health and Counseling Services Web site for this form or for additional information at: www.csueastbay.edu/shs
- d. *Meningococcal Disease.* Meningococcal disease is a potentially life-threatening bacterial infection known to occur more frequently among students living in residence halls. It is recommended that all incoming residential students consider the Meningococcal Vaccine as a way to reduce their risk for this potentially fatal disease. Each incoming freshman who is residing in on-campus housing is required to return a form indicating that he/she has received information about meningococcal disease and the availability of the vaccine to prevent contraction of the disease, and to indicate on the form whether or not he/she has chosen to receive the vaccination. The above are not admission requirements, but are required of students as conditions of enrollment in CSU. The vaccine is available at Student Health and Counseling Services

***Note:** The above are not admission requirements, but are required of students as conditions of enrollment in CSU.

Student Health and Counseling Services at Cal State East Bay provides immunizations, tuberculin skin tests, laboratory and chest x-ray exams for students at low cost by appointment. For more information, call Student Health and Counseling Services at (510) 885-3735 or visit the Student Health and Counseling Services Web site at: <http://www20.csueastbay.edu/students/campus-life/shcs/>. (Note: To remove a registration hold for measles/rubella, tuberculin tests, or Hepatitis B, bring written proof to the Reception Desk at the Student Health Center.)

What information do students need to enroll in classes?

To begin, view the Class Schedule online (www.csueastbay.edu/schedule). Students should consult with a faculty advisor to decide what courses they need and read the following information.

Class Schedule

A *Class Schedule*, prepared each quarter, lists general information, courses offered, hours, rooms, instructor names, and final examination times. The online *Class Schedule* is available before enrollment begins in MyCSUEB each quarter. Important information such as the quarterly calendar, orientation, important dates, registration, fees, course selection, and student services contact information may be viewed at: www20.csueastbay.edu/students/.

Enrollment Appointment Times

Students may enroll during their assigned appointment in a maximum of 17 units. Graduating students (as defined in the general policies section above) may add units during the second enrollment period and scheduled open enrollment times, when they will then be permitted to enroll in up to the maximum of 22 units. Existing enrollment priorities will be kept based on class levels, with graduating seniors having highest priority.

Approximately one week before enrollment begins, continuing students are e-mailed notification to their CSUEB Horizon accounts to check MyCSUEB for their enrollment appointment. The appointment times include the student's date and time to begin enrolling for classes. New students will be able to view their enrollment appointments in MyCSUEB.

Units

All college courses at Cal State East Bay have unit values based on the number of 50-minute hours they meet each week. In most lecture, lecture-discussion, and seminar courses, each hour/week is a unit, but in laboratories, activities, and performances, students may put in two or more hours per week for each unit of credit. Because each classroom hour normally requires two hours of outside study per week, working students should carefully balance the time required for academic preparation with outside commitments. Courses meeting for more hours per week than their units have the amount of weekly class time noted in their course descriptions.

Academic Load

1. Undergraduate Students. The normal academic course load for full-time undergraduate students is 15-16 units of coursework per quarter (12 units is the minimum for full-time status) per quarter.
2. Graduate Students. A graduate student who wishes to receive a 45-unit master's degree in one year needs to enroll in 15 units for three quarters or 11-12 units for four quarters. (Eight units a quarter is the minimum for full-time status.) A graduate student who wishes to receive a 90-unit doctoral degree in Education should check the Educational Leadership chapter in this catalog, as well as consult the Doctoral Handbook (available from the Department office) for academic load information.

Prerequisites

A prerequisite may be another course or group of courses containing necessary background material for full understanding of the course content or a non-course requisite. Prerequisites, if any, are noted in course descriptions.

Auditing Courses

An auditor pays the same fees and enjoys the same instructional privileges as a student enrolled for credit, but is not held responsible for examinations or term papers. Regular class attendance is expected, and enrollment as an auditor may be deleted if the expected attendance is not observed. If students wish to enroll in a course as an auditor, they must obtain permission from the instructor of the course. Enrollment as an auditor is permitted only after students otherwise eligible to enroll on a credit basis have had an opportunity to do so. Once enrolled in a course as an auditor, students may not change their enrollment to a credit basis unless such a change is requested no later than the last day to add classes. Students, who are enrolled in a course for credit, may not change to an audit basis after the Late Add period has ended.

Maximum Units for Enrollment

In MyCSUEB, students may enroll for a maximum of 17 units during the enrollment period. Graduating students (undergraduates who have filed for graduation and have 150 units completed, and graduate or doctoral students who have filed for graduation and/or have been advanced to candidacy by the faculty of the graduate program) will then be permitted to enroll in up to the maximum of 22 units during the second enrollment period and scheduled open enrollment times. Exceptions to exceed the maximum units may be made for students matriculated in programs requiring more than 180 units to degree or who require a higher unit load to graduate in the traditional time needed to complete their program.

To enroll in more units exceeding the maximum number, approval must be secured by contacting the student's major department advisor and College Dean. The student's major department will notify the Office of the Registrar and the student will then be permitted to add the additional units during the open enrollment, late registration, or late add periods.

The normal academic load for full-time undergraduate students who expect to graduate by enrolling for three quarters per year for four years is 15-16 units per quarter. Because each classroom hour normally requires two hours of outside study per week, working students should carefully balance the time required for academic preparation with outside commitments.

Course Numbers

The course numbering system indicates the level at which courses are offered. Generally, 1000 courses are freshman level, 2000 courses are sophomore level, 3000 courses are junior level, and 4000 courses are senior level. If students have completed the prerequisites, they may enroll for undergraduate courses irrespective of numbers.

English 1001 and Math Requirements

If students have earned 90 or more baccalaureate-level quarter units without having passed ENGL 1001 - College Writing I, or an equivalent course, they will not be permitted to register for additional coursework at Cal State East Bay. In addition, if they have earned 90 or more baccalaureate-level quarter units without having passed a course satisfying the General Education, Area B4 requirement in Quantitative Reasoning, they will not be permitted to register for additional coursework at Cal State East Bay.

Additional Credit Request

If students wish credit for work taken at another institution while in continuing student status at Cal State East Bay, they must, upon completing the work, have an official transcript sent to the Office of the Registrar.

Individual Study Courses

An Individual Study course is a course that is listed in the Cal State East Bay Catalog, but is not being offered during the term in which a student must gain course credit to complete a specified objective. Permission to take such a course may be granted only in cases of necessity, and arrangements must be made to determine how the faculty's teaching overload (if any) will be made up. Students may obtain applications for Individual Study (Special Registration Petition) in departmental offices. They then return the application, with signatures of approval, to the departmental office during the enrollment period for that term.

Independent Study Courses

An Independent Study course is a program of study, which is above and beyond the regular offerings of a department. The number of such a course is 4900, 5900, 6900 or 8900 depending on the level and content of the work. Such a course is considered as elective credit in the program of a student working for a specified objective. Students may apply no more than 12 units of independent study in the major department and 8 units in other departments to a baccalaureate degree.

The privilege of Independent Study is limited to undergraduate students who have at least a 2.0 (C) grade point average and graduate students with at least a 3.0 (B) grade point average in all courses in the field or department in which the Independent Study is to be taken, both at this institution and in any work attempted at other institutions. If students are on academic probation, they are ineligible for Independent Study. Independent Study is restricted to students who are able to work with minimal supervision. No faculty member is required to teach an Independent Study course, and arrangements must be made to determine how the faculty's teaching overload (if any) will be made up.

Students may obtain applications for Independent Study (Special Registration Petition) in departmental offices. The application, with signatures of approval, is to be returned to the department office during the enrollment period for that term.

A course offered by Independent (or Individual) Study shall be taught only by a professor in the department offering the credit or by a professor the department judges to be competent to teach the particular course.

Non-catalog Courses

Each quarter, Cal State East Bay offers a variety of new courses whose descriptions are not yet in the catalog. Such courses carry full credit and fulfill the same requirements as regular courses in the curriculum. Students, therefore, should not hesitate to take them. (Remedial courses, whose numbers begin with "0," are not applicable to the baccalaureate degree, but are applicable to the student's class load for that term.)

Descriptions of new, non-catalog courses appear in the *Class Schedule* each quarter. A new course may be passed by examination or challenged only after it has been listed in the *Class Schedule* and has been or is being taught.

Dual Matriculation for High School Students

Information pertaining to dual matriculation is available in the Student Enrollment Information Center on the first floor of the Student Services and Administration Building. Under these programs, eligible high school students may enroll for university credit if they satisfy the requirements for admission to this status.

Late Add Period

Students may enroll in classes during the Late Registration period, and may also enroll during the Late Add period with consent of the instructor and department offering the course. If students complete the enrollment process during the Late Registration or Late Add period, they are assessed a nonrefundable Late Registration fee.

Drop Period

Students may drop a course during the Drop period without it appearing on their permanent record. Courses dropped on or after the first day of the term may result in prorated charges.

Cancellation of Enrollment

Students who fail to fulfill enrollment or matriculation requirements, or otherwise fail to adhere to academic or Cal State East Bay regulations, are subject to immediate administrative action which may result in the student being placed on Administrative Probation, or having enrollment for that term canceled. Students who do not maintain continuous enrollment for three consecutive terms are subject to cancellation of enrollment.

What determines a student's classification?

In general, students are classified either as a full-time or part-time student, and are classified by grade level.

Classification of Students as Full- or Part-Time

The following classifications apply to students enrolled in the fall, winter, spring, and summer quarters (not University Extension non-degree programs and summer sessions):

1. Full-time undergraduate students (including students seeking a second baccalaureate) are those enrolled in 12 or more units in a regular quarter. Part-time undergraduate students are those enrolled in fewer than 12 units. (Note that in order to graduate in 4 years or 12 quarters, students must complete 15-16 units per quarter.)
2. Full-time enrollment for "Unclassified Post-baccalaureate" students not enrolled in a graduate degree program is 12 or more units in a regular quarter.
3. Full-time enrollment for "Graduate" students and "Classified Post-baccalaureate" students is 8 or more units.
4. Full-time enrollment for veterans (or dependents of disabled or deceased veterans), or reservists under Chapter 30, 31, 33, 34, 35, or 106 is 12 or more units, according to V.A. regulations. Each quarter, veterans and eligible dependents should consult the Veteran Affairs Coordinator before the first day of classes and submit their forms requesting certification of enrollment for V.A. benefits.

Note: Undergraduate and graduate students who apply for Veterans' Benefits (or for benefits as dependents of disabled or deceased veterans), international students wishing INS certification, student athletes wishing to compete in intercollegiate sports, and students on most types of financial aid must be enrolled in courses that apply to a definite program (baccalaureate or master's degree and/or credential).

Classification of Undergraduates by Grade Level

Undergraduate Students are assigned a class level according to the following plan:

Quarter Units Earned Toward the Degree

1. Lower Division

Freshmen Fewer than 45

Sophomores	45 but fewer than 90
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2. Upper Division

Juniors	90 but fewer than 135
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Seniors	135 or more
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Graduating Seniors	150 or more, filed, and paid fee
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International Student Enrollment Policies

The U.S. Custom and Immigration Enforcement requires students on non-immigrant F-1 and J-1 visas to pursue a full course of study in a specific program. Therefore undergraduate students are expected to complete a minimum of 12 units per quarter for three consecutive quarters. Graduate and second baccalaureate students must complete a minimum of 8 units per quarter for three consecutive quarters.

How do students enroll for classes?

Students enroll for classes in the preceding quarter using MyCSUEB, an automated online enrollment system. Approximately one week before enrollment begins, continuing students are e-mailed notification to their CSUEB Horizon accounts to check MyCSUEB for their enrollment appointment. New students may review their enrollment appointments in MyCSUEB.

The *Class Schedule* is generally available online around the same time as students receive their "Enrollment Appointment." Students should read the Class Schedule, and then meet with their academic advisor to plan their program of classes. Enrollment times are determined by the student's class level. Students will be able to enroll or make adjustments to their class schedule any time after their assigned enrollment time. See the Class Schedule for MyCSUEB's operating hours and for enrollment procedures. If students have any difficulties enrolling, they can call the Office of the Registrar at 510-885-3973.

Cooperative Education, Independent Study, Individual Study, Project, Thesis Courses

To enroll for a Cooperative Education course, students must complete a "Cooperative Education Agreement" form available from the Academic Advising and Career Education/Cooperative Education office, on the second floor of the Student Services and Administration Building. After obtaining the necessary approvals, the student may then enroll through MyCSUEB. [*Note:* International students on F-1 visas should contact the Center for International Education (510-885-2880) to discuss employment authorization for a Cooperative Education course before enrolling for the course.]

Students will not be able to enroll for Independent Study, Individual Study, Project, Departmental Thesis, University Thesis or Dissertation courses in MyCSUEB. A "Special Registration Petition" available from the department offering the course, is required for enrollment.

Schedule Changes

Students may add, swap and waitlist courses using MyCSUEB during their enrollment appointment, open enrollment, and the Late Registration period. Students may also add courses during the Late Add period with the consent of the instructor and academic department offering the course. Dropping courses may be done online through MyCSUEB during the first two weeks of the term, and students may change their grade type until the end of the Late Add period. If students are on a Wait List and wish to add a class, it is important that they attend the first class meeting. See "Registering for Classes" on the university's Web site for specific instructions. Although departments may drop students from a class for failure to attend the first meeting, they do not have to do so. Therefore, if a student wishes to drop a class, they should be sure to do so in MyCSUEB during the first two weeks of the quarter during the Drop period.

Fee Refunds

If students are eligible for a fee refund, see "Paying Your Fees" on the university's Web site for information. The refund policies are also available in the Student Financial Services chapter of this catalog under the section "What are Cal State East Bay's refund policies."

What changes can students make in their enrollment status?

Students may add other classes, drop or withdraw from classes, and make a few other changes as discussed below.

Adding Courses

Students may add courses during their enrollment appointment, open enrollment and the Late Registration period either by (a) using MyCSUEB, or (b) coordinating their enrollment with the appropriate academic department office for Independent Study, Individual Study, Project, and/or Thesis courses. Students have the right to add classes during these enrollment periods, subject to their having successfully completed the prerequisites (coursework and/or consent of instructor as stated in the Catalog) and to the availability of sufficient capacity in the class. Students may also add courses during the Late Add period with the consent of the instructor and academic department offering the course.

Dropping Courses

The word "drop" refers to official deletion of a course from a student's record. If students cannot continue enrollment in a course for which they enrolled in for that particular quarter, they must officially drop the course using MyCSUEB. Students may drop courses through the end of the Drop period without the course appearing on their permanent record. After the Drop period, students may only withdraw from courses. See the next section "Withdrawing from the University" for information on withdrawing from all courses in a term.

Departments offering a class may drop students if they do not attend the first class meeting or if they have not met the course prerequisites that are published in the University Catalog. Some departments may call or email students as a matter of courtesy when they are being dropped, but other departments may not. There is no university policy and this determination will vary by department. Students should not assume that they will be dropped automatically if they do not attend class.

Withdrawing from Course(s)

Students can not "drop" after the end of the Drop period, but they can "withdraw" until the seventh week of the term. The word "withdrawal" refers to official termination of enrollment in a class after the Drop period. Students can withdraw from a class only for serious health or personal problems beyond their control. If they withdraw from a class, the class will appear on their record with a grade of "W." The administrative symbol "W" indicates that a student was permitted to withdraw from a course after the Drop period with the approval of the instructor and appropriate campus officials. This designation carries no connotation of quality of student performance and is not used in calculating grade point average. Beginning the third week of classes, students will be permitted to withdraw from courses by printing the downloadable "Withdrawal" form from the University Web site under "current students". On the form, state the reason, obtain approvals of the instructor and department and return the completed form to the Enrollment Information Center or the Academic Services Office. The Concord Campus Academic Services may approve Withdrawals for courses offered at Concord.

Undergraduate students may withdraw from no more than 28 quarter units of coursework in their undergraduate career, including any courses taken in CSUEB Open University. When serious illness or accidents are documented and used as a basis for approval of withdrawal from all classes in the term, the units will not count against the 28 unit maximum allowed. Students who will exceed the maximum units allowed may petition for a waiver of the requirement to allow for additional withdrawals.

Withdrawals are normally not permitted after the seventh week of the quarter particularly for individual courses. Students who have completed work up to that point and cannot continue should normally be assigned an "I" (Incomplete) grade. If students have serious and compelling nonacademic reasons for withdrawal from a class after the seventh week they must write a statement outlining the reasons for the withdrawal and obtain written documentation of the circumstances from an impartial third party such as a doctor or lawyer. The document should be an original document (not a copy) on letterhead; then obtain the signatures of the

instructor, department chair and college dean, and submit the form and documentation to the Student Enrollment and Information Center, 1st Floor, Student Services and Administration Building on the Hayward Hills Campus, or the Concord Campus Academic Services Office for review by the Registration and Records Appeals Committee. Approval of the withdrawal is not automatic. Withdrawal from any class in which the final examination was taken is not permitted, regardless of circumstances or documentation. Withdrawals will not be processed if students have taken the final examination for the course or have satisfied all the requirements for the course.

A withdrawal may not automatically result in a fee refund. Students should consult with Student Financial Services for any questions about fee refunds related to withdrawing from classes.

If students enroll for a course and fail to attend, but do not officially drop or withdraw, they will receive an appropriate administrative grade indicating failure ("WU" or "NC" depending on the grading pattern in which they enrolled). Refer to the Grading and Academic Standards chapter of this catalog.

Withdrawing from the University

If students find it necessary to cancel their enrollment or to withdraw from all classes after enrolling for any academic term, they are required to follow the university's official withdrawal procedures described above. Failure to follow formal university procedures may result in an obligation to pay fees, as well as the assignment of failing grades in all courses. Students may also need to apply for readmission if they have not enrolled for three consecutive terms before being permitted to enroll in another academic term. Additional information on canceling enrollment and withdrawal procedures is available from Planning and Enrollment Management, at the Enrollment Information Center.

Undergraduate students may withdraw from no more than 28 quarter units of coursework in their undergraduate career, including any courses taken in CSUEB Open University. When serious illness or accidents are documented and used as a basis for approval of withdrawal from all classes in the term, the units will not count against the 28 unit maximum allowed. Students who will exceed the maximum units allowed may petition for a waiver of the requirement to allow for additional withdrawals.

If students receive financial aid funds, they must consult with a financial aid counselor in the Financial Aid Department prior to withdrawing from the university regarding any required return or repayment of grant or loan assistance received for that academic term or payment period. Students who have received financial aid and withdraw from the institution during the academic term or payment period may need to return or repay some or all of the funds received, an action which may result in a debt owed to the institution by the student.

A withdrawal may not automatically result in a fee refund. Students should consult with Student Financial Services for any questions about fee refunds related to withdrawing from classes.

Submitting a "Withdrawal" form is not required if students find it necessary to drop all courses in which they enrolled in using MyCSUEB during the Drop period. For refund information, refer to the Refund of Fees section in the Student Financial Services chapter.

If students find it necessary to withdraw from the university after the Drop period has ended (during the third through the seventh week of instruction), they must complete a "Withdrawal" form, obtain approval signatures from each instructor and department chair, and return it to the Enrollment Information Center or the Academic Services Office. Withdrawal at this time can be only for serious health or personal problems beyond the student's control. Normally withdrawal is not permitted beyond the seventh week of the quarter. If students have attended classes up to that time, they should discuss with the instructor the possibility of receiving an "I" (Incomplete) grade if circumstances prevent completion at the time. Withdrawals after the seventh week of instruction must have the reason substantiated in writing by an impartial third party and require the approval signature of the instructor, department chair and college dean. The request is then reviewed by the Registration and Records Appeals Committee. Approval is not automatic. A quarter from which a student withdraws is not counted as an interruption of enrollment for continuing student status. Even if approved, a late withdrawal petition does not result in a fee refund. Students should consult with Student Financial Services for any questions about fee refunds related to withdrawing from classes.

A Withdrawal (W) will be recorded for each course in the term on a student's permanent record if they withdraw from the university after the Drop period. The administrative symbol "W" indicates that a student was permitted to withdraw with the approval of the instructor and appropriate campus officials. This determination carries no connotation of quality of student

performance and is not used in calculating grade point average. If students withdraw from the university, but do not file an official "Withdrawal" form, they will receive appropriate administrative grade(s) indicating failure ("WU" or "NC" depending on the grading pattern in which they are enrolled).

Change of Major, Degree, Minor, or Credential Objective

Undergraduate or post-baccalaureate students who wish to change their baccalaureate major or degree objective or declare a minor, and graduate students who wish to change to unclassified or second baccalaureate status, must obtain the required form in the Enrollment Information Center on the first floor of the Student Services and Administration Building or on the University Web site under "current students". A change is not official until the form has been signed and returned to the Office of the Registrar. Students should be aware that they will be responsible for the major or minor requirements in the Catalog in effect at the time they file the form.

Change of Address

Students may change their address online in MyCSUEB (<https://my.csueastbay.edu>). Students must officially notify the university of an address change in order to ensure that all official correspondence is sent to the correct address. The university is not responsible for mailing correspondence to the incorrect address unless the student has formally made an address change.

Change of Name

Students may download the Personal Data Change form (for name changes) found on the University Web site under "current students," complete and submit the form with copies of required government issued documentation (e.g., marriage certificate, driver's license, or passport) to the Enrollment Information Center in the Student Services and Administration Building. Forms may also be mailed to the Office of the Registrar at Cal State East Bay.

Planned Educational Leave

Students may petition for a Planned Educational Leave to pursue educationally related activities which will enhance the prospect of successful completion of their academic program, but which do not require enrollment at Cal State East Bay or any other institution of higher education. Students who are unable to enroll due to compulsory military service or because of a documented disability or because of pregnancy may apply for a leave of absence. Students requesting a leave should be in good academic standing in a program leading to a degree.

A Planned Educational Leave may be for a period of up to a total of two years (eight consecutive terms) if students are enrolled in a program leading to a degree. The leave must be approved by their faculty advisor or department chair and the Office of the Registrar. If approved, students will retain graduation catalog rights and may enroll as a continuing student, provided they return and enroll in the same major for the quarter indicated. Failure to return from a planned educational leave by the quarter indicated means loss of catalog rights and students will be required to apply for readmission and pay an application fee. The Planned Educational Leave form is available online; visit the University web site under "Current Students" to download the form.

Which undergraduate placement examinations do I need to take?

Placement examinations are given in Chemistry, English, Mathematics, and Music. These are not admission tests, but a way to determine what courses best match your level of preparation. *We strongly recommend completion of these tests before your first quarter of registration.*

Systemwide Placement Test Requirements

The California State University requires that each entering undergraduate, except those who qualify for an exemption, take the CSU Entry Level Mathematics (ELM) examination and the CSU English Placement Test (EPT) prior to enrollment. These placement tests are not a condition for admission to the CSU, but they are a condition of enrollment. These examinations are designed to identify entering students who may need additional support in acquiring college entry-level English and mathematics skills necessary to succeed in CSU baccalaureate-level courses. Undergraduate students who do not demonstrate college-level skills in both English and mathematics may be required to participate in the Early Start program during the summer (see Early

Start program information) and will be placed in appropriate remedial programs and activities during the first term of their enrollment. Students placed in remedial programs in either English or mathematics must complete all remediation in their first year of enrollment. Failure to complete remediation by the end of the first year may result in denial of enrollment for future terms.

Students may register for the EPT and/or ELM at <https://ept-elm.ets.org/CSU/>. For further information on the EPT and/or ELM, please visit the Testing Office in Library, Room LI 3165A or, visit the Testing Office Web site, or call (510) 885-3661.

English Placement Test (EPT)

The English Placement Test (EPT) is designed to assess the level of reading and writing skills of students entering the California State University. The CSU EPT must be completed by all non-exempt entering undergraduates prior to enrollment in any course, including remedial courses. Students who score 147 or above on the EPT will be placed in college-level composition classes.

Exemptions from the EPT are granted only to those who present proof of one of the following:

- Placement in the "Ready for CSU College-level English courses" category on the Early Assessment Program (EAP) English taken in conjunction with the 11th grade California Standards Test in English Language Arts
- A score of 550 or above on the critical reading section of the College Board SAT™ Reasoning Test taken March 2005 to June 2011
- A score of 500 or above on the critical reading section of the College Board SAT™ Reasoning Test effective Summer/Fall 2011
- A score of 680 or above on the writing section of the SAT Reasoning Test taken March 2005 or later
- A score of 550 or above on the verbal section of the College Board SAT I: Reasoning Test taken between April 1995 and January 2005
- A score of 680 or above on the College Board SAT II: Writing Test taken between May 1998 and January 2005
- A score of 22 or above on the enhanced ACT® English Test taken October 1989 or later
- A score of 3, 4 or 5 on either the Language and Composition or Literature and Composition examination of the College Board Advanced Placement Program
- Completion and transfer to CSU of a college course that satisfies the CSU General Education requirement in English Composition, provided such a course was completed with a grade of C- or better.

If special circumstances make it impossible for you to take the test at the first available administration following admission, you must plan to meet the requirement at the next scheduled opportunity. *Failure to take the English Placement Test as required, at the earliest opportunity after admission and before initial enrollment, will lead to a hold on the student's registration.* Each test administration requires a separate registration form. If your religious convictions prevent you from taking the EPT on the scheduled test dates, you must contact the Testing Office to make special arrangements before registering. You must provide a letter on official letterhead from an appropriate religious authority to the campus Testing Office. Persons with verified disabilities should consult Accessibility Services about possible alternative arrangements for meeting the EPT requirement.

Information bulletins and registration materials for the EPT will be mailed to all students subject to the requirements. The materials may also be obtained from the Testing Office.

Appropriate Coursework Based on EPT Results

Students should consult the Senior Director of Undergraduate Studies and General Education, Dr. Sally Murphy, 1st Floor, Student Services and Administration Building, for placement advising if their EPT score is below 147. Students who score 147 or above on the EPT are eligible to enroll in ENGL 1001.

Students who are required to enroll in remedial English coursework must enroll in such coursework in their first quarter and every quarter thereafter, including summer, until remediation is completed. A student who fails the same remedial course twice or does not complete remediation in six consecutive quarters (including summer) has a hold placed on future registration (and is disenrolled if already registered). The hold can only be removed by 1) completing the remedial course which was failed, or 2) completing all remedial courses (if six quarters have expired), or 3) completing the baccalaureate level English course satisfying

G.E. Area A2, Written Communication, (if 90 quarter units have been completed). Students who have completed more than 90 quarter units must complete the G.E. course before reentry.

Remedial courses are not applicable to the baccalaureate degree requirements. However, they do count towards full-time enrollment for financial aid.

You may take the EPT only once. Students whose EPT scores require them to complete remedial English coursework can gain admission to freshman English composition (ENGL 1001) only upon recommendation of the instructor of their last remedial course (ENGL 0735, ENGL 0803, or ENGL 0910).

Entry-Level Mathematics (ELM) Exam

The Entry Level Mathematics (ELM) Examination is designed to assess and measure the level of mathematics skills acquired through three years of rigorous college preparatory mathematics coursework (Algebra I and II, and Geometry) of students entering the California State University (CSU). The CSU ELM must be completed by all non-exempt entering undergraduates prior to enrollment in any course, including remedial courses. Students who score 50 or above on the ELM will be placed in college-level mathematics classes.

Exemptions from the ELM are granted only to those who present proof of one of the following:

- Placement in the "Ready for CSU College-level mathematics courses" category on the Early Assessment Program (EAP) Mathematics taken in conjunction with the 11th grade California Standards Test in Summative High School Mathematics or Algebra II
- Placement in the "Ready for CSU College-level mathematics courses - Conditional" category on the Early Assessment Program (EAP) Mathematics taken in conjunction with the 11th grade California Standards Test in Summative High School Mathematics or Algebra II, PLUS successful completion of a CSU-approved math or math-related course or activity taken before you enroll at a CSU campus
- A score of 550 or above on the mathematics portion of the College Board SAT Reasoning Test
- A score of 550 or above on a College Board SAT Subject Test in Mathematics (level 1 or level 2)
- A score of 23 or above on the ACT® Mathematics Test taken October 1989 or later
- A score of 3 or above on the College Board Advanced Placement Calculus AB or Calculus BC examination
- A score of 3 or above on the College Board Advanced Placement Statistics examination
- Completion and transfer to CSU of a college course that satisfies the requirement in Quantitative Reasoning, provided such a course was completed with a grade of C- or better

Students required to take this examination must do so as soon as possible after admission and before their first enrollment. (The results of this examination do not affect admission.)

Prepare for the test seriously. Review your high school math or take a math refresher course. A performance that is less than your best will make you take more math than necessary. The exam consists of 50 multiple choice questions from three areas: algebra; geometry; and numbers and data.

The CSU has several websites where you can learn more about the ELM and take practice exams.

- CSU Math Success Web site: http://www.csumathsuccess.org/elm_requirement
- CSU Focus on Mathematics booklet: <http://www.calstate.edu/sas/documents/FocusonMath.pdf>

Students who cannot demonstrate basic competence at the level of intermediate algebra on the examination must take steps to overcome deficiencies in their first quarter of enrollment. Depending on the ELM test score, students will be required to enroll in MATH 800 - Introduction to Algebra, MATH 900 - Elementary Algebra and MATH 950 - Intermediate Algebra. Courses beginning with zero are not applicable to the baccalaureate degree, but do count toward full-time status and financial aid.

Students who are required to enroll in remedial math coursework must enroll in such coursework in their first quarter and every quarter thereafter, including summer, until remediation is completed. A student who fails the same remedial course twice or does not complete remediation in six consecutive quarters (including summer) has a hold placed on future registration (and is disenrolled if already registered). The hold can only be removed by (1) completing the remedial course failed, or (2) completing

all remedial courses (if six quarters have expired), or (3) completing a baccalaureate level mathematics course satisfying G.E. Area B4, Quantitative Reasoning (if 90 quarter units have been completed). Students who have completed more than 90 quarter units must complete the G.E. course before reentry.

Information bulletins and registration materials for the ELM examination will be mailed to all students who may be subject to the requirements. The materials may be obtained from the Testing Office. There is a fee for the ELM.

Implementation of the EPT and ELM Exams

After admission, each undergraduate student is sent a packet which indicates that taking the EPT and ELM exams are requirements which should be fulfilled at the next offering of the test. If you fail to take the EPT and/or the ELM tests before your first term of enrollment, a hold will be placed on your registration until you do take the test(s).

Other Placement Examinations

Placement examinations are given to place students at appropriate levels of achievement as follows. Check the Class Schedule each quarter for specific details.

Modern Languages and Literatures

Placement exams in French and Spanish languages are offered on a continuing basis through the Department of Modern Languages and Literatures. If you have prior language experience but are uncertain of your level of ability (elementary, intermediate, or advanced), you are encouraged to consult with a faculty advisor before enrolling in a French or Spanish language course. Placement exams are given only on the recommendation of faculty.

Music Auditions and Proficiency Examinations

Students who declare a major in music must complete examinations and auditions to determine: (1) theory placement, (2) level of applied study, (3) piano proficiency, and (4) major performance ensemble. These examinations are not a substitute for the Advanced Placement Test in Music and should not be confused with the Advanced Placement Program. Auditions and examinations are scheduled prior to the first week of each quarter. For additional information and specific appointment times, contact the Department of Music, MB 2571, or telephone 885-3135.

How may I obtain credit by examination as an undergraduate student?

Cal State East Bay grants credit to those students who pass examinations that have been approved for credit system wide. These include the Advanced Placement Examinations and some College Level Examination Program (CLEP) exams.

Also see "Challenging Courses" in this section.

Credit by Examination Policy

The award of credit for successfully passing any approved examination is subject to the following conditions:

1. Credit shall not be awarded for successful passage of any examination if the student previously took that examination during the past quarter.
2. Credit shall not be awarded when equivalent degree credit has been granted for regular coursework, credit-by-evaluation, or other instructional processes such as correspondence.
3. Credit shall not be awarded when credit has been granted at a level represented by the examination in question.
4. Duplicate credit shall not be awarded where there are overlapping tests, university level work, or both. Where there is partial overlap, the amount of examination credit shall be reduced accordingly.
5. The total amount of credit earned on the basis of externally developed tests, which may be applied to a baccalaureate degree, shall not exceed 45 quarter units. Advanced Placement credit is excluded from this limit.

Challenging Courses

Students may challenge courses by taking examinations developed at Cal State East Bay. Credit shall be awarded to those who pass them successfully. No instructor is obliged to offer credit-by-examination for a course.

The university recognizes that exceptional students, by reason of special studies or experiences, may already have achieved the objectives of certain courses in the basic program; therefore, students with this background may petition to receive credit in selected courses by special examination. Such an examination is normally from three to six hours in length and may be oral as well as written. Each course may be challenged only once.

Students who wish credit under this plan must enroll for the course during the enrollment period for the units to be earned by the examination. The class being challenged for credit must be listed in the *Class Schedule* for the particular quarter. Obtain a petition for credit by examination from the office of the department offering the course, and get the permission of both the instructor and department chair. The examination must be administered during the first two weeks of the quarter and the results, in grade form, must be submitted to the Office of the Registrar by the end of the fifth week. The instructor is responsible for notifying the student of the results of the examination.

If the exam is passed with a grade of "C-" or higher, the letter grade and credit by examination will be indicated on the student's permanent record. If students receive a grade of "D+," "D," or "F" on the examination, the student must either continue taking the course formally or officially withdraw from it within one week after completing the examination. (*Note:* The instructor need not inform the Office of the Records and Registration of the grades "D+," "D" or "F.") Some departments (e.g., Modern Languages and Literatures) only allow their courses to be challenged for a "CR" grade.

No more than 36 quarter units of credit obtained by challenging courses may be applied toward the baccalaureate degree. No credit earned by examination may be used to satisfy the requirement of 45 quarter units in residence at Cal State East Bay.

Advanced Placement

Cal State East Bay grants credit toward its undergraduate degrees for successful completion of examinations of the Advanced Placement Program of the College Board. Students who present scores of 3 or better will be granted 4-12 quarter units of transfer college credit.

The Advanced Placement Examinations referred to below are prepared and offered by the College Board. Unit credit will be granted to those passing the exams, but no letter grade will be assigned or computed in a student's grade point average.

If you have Advanced Placement credit, request the College Board to send your test score(s) to the Office of Admission at Cal State East Bay.

Normally, if Advanced Placement course credits satisfy G.E. Area B, C, and/or D requirements, they will apply to sophomore year general education requirements and not to freshmen clusters because all freshmen benefit from participating in these learning communities. Only if the amount of Advanced Placement credit exceeds what can be applied to the second year will it be applied to freshmen clusters.

Please see the list of Advanced Placement and credit awarded.

International Baccalaureate Program

Cal State East Bay recognizes the International Baccalaureate (IB) as a challenging college-preparatory program. Four (4) to fifteen (15) units of college credit will be awarded for each IB Higher Level Examination passed with a score of 4, 5, 6, or 7. (No credit will be awarded for IB Subsidiary Level passes.) A copy of the official IB transcript must be supplied to the university when credit is requested. All credit is granted in terms of existing Cal State East Bay courses with equivalent subject matter determined by the department.

Please see the list of IB Exam and the Cal State East Bay credit awarded.

College Level Examination Program

Please see the list of CLEP Tests and the Cal State East Bay credit awarded.

Science Equivalency Test Program

Students who pass the American Chemistry Society Cooperative Examination in General Chemistry at or above the 50th percentile will receive 5 units of credit.

Credit for Non-Collegiate Instruction

Cal State East Bay grants undergraduate degree credit for successful completion of non-collegiate instruction (either military or civilian) appropriate to the baccalaureate degree that has been recommended by the Commission on Educational Credit and Credentials of the American Council on Education. Attendance in military courses and schools must be documented by forms DD214 or DD295. Such credit shall be clearly identified on the permanent record.

Credit for the following types of courses may be granted:

- Lower division baccalaureate/associate degree credit courses which are comparable to courses offered on most CSU campuses. (Credit is not allowed for occupationally oriented courses designed to enable a student to function only as a technician.)
- Upper division baccalaureate degree credit courses.
- Graduate degree credit courses.

The numbers of units allowed are those recommended in *the Guide to the Evaluation of Educational Experience in the Armed Services and the National Guide to Educational Credit for Training Programs*.

Cal State East Bay shall determine which units shall be applied as general education, major, or elective credit.

Student Services

Cal State East Bay provides a variety of services to students under the direction of the Provost, the Vice President for Student Affairs, the Vice President for Administration and Finance, and the Associated Students. These services offer a number of special programs which help students derive the maximum benefit from their university experience.

Academic Assistance

Several sources for advising services exist on campus. The quarterly Class Schedule (available online at www.csueastbay.edu/schedule/) also includes information regarding advisement services.

Academic Advising and Career Education

Academic Advising and Career Education (AACE) provides a full range of excellent academic advising and counseling services to all undergraduate students. Services include guidance and official updates on your progress toward completing your general education and graduation requirements (other than major requirements); assistance in developing realistic educational goals and a plan to achieve those goals; an explanation of complex academic policies and procedures; workshops throughout the year, and individual and group advising for new students.

AACE is the academic advising home for undergraduate students who have not yet declared a major at California State University, East Bay. We offer academic counseling and specialized assistance in exploring, researching and selecting a major based on your individual, educational and career goals. Undeclared students who are placed on academic probation are required to see an AACE academic counselor and/or attend one workshop "Understanding Academic Probation" each quarter until good standing is achieved.

In addition, AACE provides counseling and support services for all undergraduates who are experiencing academic difficulties such as those on academic probation or those who have been recently disqualified. Students (non-EOP or EXCEL) on academic probation are encouraged to meet with an AACE counselor to discuss strategies for improving their grades and academic standing.

Consulting with an Advisor

Every student who enters Cal State East Bay is entitled to receive major advising from a faculty member in the department or, if taking an Interdisciplinary Studies major, a committee member in his or her major. Undeclared Students, International Students, as well as most other undergraduate students, receive advising on General Education and other undergraduate degree requirements from Academic Advising and Career Education (AACE). All new students should see their advisors (major advisor and one of the AACE academic counselors) at least once each quarter during their first year at Cal State East Bay.

Freshmen and sophomores should develop a program with their advisors that will satisfy all requirements (general education, major, and minor or option if required) for the degree. Undergraduate transfer students are encouraged to attend orientation for their first advising session or contact Academic Advising and Career Education (AACE) at (510) 885-3621. Once transfer students receive the evaluation of their previous college credit, they should develop with their advisor a complete program of courses leading to the baccalaureate degree. Students should consult with their major and GE advisors before making changes to their program.

For information on the catalog requirements under which a student may graduate, see the Undergraduate Degree Information chapter.

Course Requirement Information

Faculty shall provide you with a course syllabus, which should be placed on the course Blackboard site at the beginning of the quarter, containing the following information:

1. Name of instructor, office location, office hours, office telephone number, and @csueastbay.edu e-mail;
2. Course number and title, classroom location, number of units, prerequisites, a course description, objectives and student learning outcomes;
3. Required texts and any other required and/or recommended materials;
4. Student-supplied equipment and materials necessary for course activities;
5. Course specific requirements and their due dates, such as examinations, quizzes, papers, field trips, and labs;
6. Grading policy, which includes the relative weight of examinations, quizzes, papers, class participation, and other factors, and the grading scale;
7. Attendance and make-up work policies and implications for grading;
8. The following statement and reference to University policies regarding cheating and academic dishonesty: "By enrolling in this class the student agrees to uphold the standards of academic integrity described at <http://www20.csueastbay.edu/academic/academic-policies/academic-dishonesty.html>."
9. Accommodations for students with disabilities. Sample statement: "If you have a documented disability and wish to discuss academic accommodations, or if you would need assistance in the event of an emergency evacuation, please contact me as soon as possible. Students with disabilities needing accommodation should speak with the Accessibility Services."
10. Emergency information. Sample statement: "California State University, East Bay is committed to being a safe and caring community. Your appropriate response in the event of an emergency can help save lives. Information on what to do in an emergency situation (earthquake, electrical outage, fire, extreme heat, severe storm, hazardous materials, terrorist attack) may be found at: <http://www20.csueastbay.edu/af/departments/risk-management/ehs/emergency-management/index.html>. Please be familiar with these procedures. Information on this page is updated as required. Please review the information on a regular basis."

Faculties also are encouraged to include additional items such as:

- a. Course outline;
- b. Types of quizzes and exams (e.g., true-false, multiple choice, short-answer, essay);
- c. Availability of appropriate tutoring services;
- d. Policies regarding audio and video recording and use of electronic devices;
- e. Reference to University classroom behavior policies;
- f. Classroom food and drink policies.

Furthermore, faculty should advise you of their expectations for you in the course no later than the end of the second class. Any changes in course requirements should be communicated to you in a timely manner. It is your responsibility to read the course statement and to request any clarification of course policies. If you add the course after the first week of class, you must seek course information in a timely manner.

This policy is to be implemented by each department.

Faculty Office Hours

The faculty of the university is available during regularly scheduled office hours, which are at times other than scheduled classes. The times of the office hours are posted outside each faculty office, at the faculty member's department, on the department website, and on the faculty member's course syllabi. The faculty member informs the department of his/her office hours the first day of classes each quarter.

Full-time faculty members maintain a minimum of *three office hours per week* and also make provision for meeting with students by appointment at a mutually convenient time beyond the stated office hours. The full-time faculty member's office hours shall be held over at least two days and at least in half-hour blocks. Part-time faculty will maintain the equivalent of one office hour per week for each four WTUs of their teaching load with a minimum of one hour and a maximum of three hours per week.

Faculty teaching online must also hold office hours and may make alternative arrangements with the Department Chair to be available online or by telephone. Online faculty's office hours must include at least *one hour of availability* by telephone per week.

If for any reason a faculty member cannot meet the posted office hours, the faculty member will inform the Department Chair. If possible, the department will note the absence on the faculty office door.

Normal office hours are to be maintained during the Final Examination period. If a final examination conflicts with a posted office hour, an alternative hour is to be posted for that week alone.

Registration Assistance

Students at Cal State East Bay can register for classes prior to each quarter via the university's online registration system in MyCSUEB. Demonstrations and instructions for the enrollment process can be found within the "Help" feature in MyCSUEB. Students requiring assistance may call the Office of the Registrar at (510) 885-2784 or visit the Student Enrollment Information Center on the first floor of the Student Services and Administration Building on the Hayward Campus.

Educational Opportunity Program

Established in 1969, the Educational Opportunity Program (EOP) provides admission and retention support services to low-income and educationally disadvantaged California residents who demonstrate the motivation and potential to succeed in college. Although 80% of EOP students entering Cal State East Bay meet the CSU eligibility for regular admission, the program also provides access for a limited number of first-time freshmen who do not qualify for regular admission but have demonstrated the academic potential and motivation to pursue a college education - if given the opportunity to do so. EOP provides its participants with a broad range of support services during their undergraduate studies, as long as they maintain full-time status, make satisfactory progress, and fulfill program requirements.

Student services provided by EOP include recruitment, preadmission counseling, special admissions, a Summer Bridge program (for entering EOP freshmen), specialized orientation sessions, academic advisement, personal counseling, skill-enhancement workshops, career guidance, peer advising, support groups, social/cultural activities, referral services, and EOP grants for eligible students.

To apply for admission to the program, you must complete the online CSU Mentor CSU Application for Undergraduate Admission and check the appropriate box for EOP services. EOP applications are available at: <http://www.csumentor.edu>. Once the Cal State East Bay application is submitted (online), EOP applicants will have access to an online EOP link to the EOP Application Information Form and two EOP recommendation letters for online processing for Fall term.

EOP is a high-demand program which only accepts applications for Fall term from applicants new to the CSU system. Currently enrolled and/or previously enrolled students (not formerly in an EOP CSU program) are not eligible to apply. Applicants who submit all required documents will be reviewed and if qualified, will be admitted on a first-come, first-serve basis. For assistance in filling out the application forms, and/or for further information about the program's eligibility requirements, please visit our website at www.csueastbay.edu/eop or contact the EOP Admissions Office at 510-885-4683.

EXCEL Program

The EXCEL program (a TRiO Student Support Services program) is funded by the U.S. Department of Education. The program provides a variety of educational services for Cal State East Bay undergraduates who have a demonstrated academic need and are low-income, first-generation college or disabled. The major goals of the program are to increase the retention and graduation rates of program participants and to create a supportive environment that encourages academic success.

EXCEL Academic Life Planning Counselors assist students in developing academic plans to complete their undergraduate degrees and solve academically related problems. They also provide advising in general education requirements, career and goal planning, scholarship assistance, guidance on balancing academic and personal life, and graduate school admission.

Learning skills improvement is provided by the Learning Resources Counselor. Assistance includes diagnosing academic weaknesses in learning and language skills and providing support in test-taking, reading textbooks, taking lecture notes, study skills, time management, and offering tutoring in basic academic subjects.

EXCEL students also have access to a variety of reference books on careers, learning skills, English, mathematics, reading and scholarships on non-federal financial assistance available to women, minorities, and people with disabilities in California and throughout the United States. Information about summer programs and internships is also available.

To apply to the EXCEL Program or to find out more about its services, call 510-885-3722 or visit the main office located in the Library Complex (LI) Room 2450. Additional information can also be found on the website at www.csueastbay.edu/excel.

Project IMPACT

Project IMPACT is funded by a grant from the U.S. Department of Education TRIO/Student Support Services Programs to help eligible students with disabilities succeed in their academic program. The services provided by Project IMPACT are beyond the legally mandated services afforded to students with disabilities by Accessibility Services. Project IMPACT offers selected students individualized services such as:

- Academic Advising
- Tutoring Resources
- One-on-One Support
- Wellness Counseling
- Skills Building Classes
- Financial Aid and Scholarship Information
- Help with Choosing a Major and a Career
- Assistive Technology Computer Lab and Training

You are eligible for this program if:

1. You are admitted to Cal State East Bay
2. Provide documentation of a permanent disability
3. Registered with and referred by Accessibility Services
4. U.S. Citizen, national or permanent resident alien
5. Working toward your FIRST baccalaureate degree
6. For more information about Project IMPACT contact a counselor at 510-885-3868.

Renaissance Scholars Program

Jointly funded by the University, private foundations, non-profit organizations, and individual donations, the Renaissance Scholars Program provides a variety of educational and support services for current or former foster youth attending Cal State East Bay. The major goals of the program are to create the retention and graduation rates of program participants and to create a supportive environment that encourages academic success.

Renaissance Scholars assists students in developing life and leadership skills while providing a wide variety of services including year-round on-campus housing, academic, career, and psychological counseling, scholarship opportunities, emergency assistance, recognition events, mentoring, workshops, field trips, and tutoring.

To qualify for Renaissance Scholars, a student must meet the following criteria:

- Be a current or former foster youth attending Cal State East Bay between the ages of 17-23
- Qualify for "Independent Student Status" under federal financial aid guidelines
- Qualify for admissions to the Educational Opportunity Program (EOP)
- Be a California resident

- Be a graduating high school senior or incoming community college transfer student
- Have a minimum high school GPA of 2.2
- Transfer students must have earned a 2.5 GPA in all transferable coursework
- Demonstrate high motivation and potential

To find out more about Renaissance Scholars, visit the main office located in the Library Complex (LI), Room 2500, browse the website at www.csueastbay.edu/renaissance, email us at renaissance@csueastbay.edu, or call 510-885-3747.

Student Center for Academic Achievement

The Student Center for Academic Achievement provides learning assistance such as individual and group tutoring, problem-solving sessions, and online resources for regularly enrolled students of the university. Students can receive tutoring in writing, math, or statistics. Workshops are conducted each quarter to improve students' academic skills. Workshops include topics such as preparing for the WST, taking notes, studying for exams, managing time, and reading textbooks. Cal State East Bay students are encouraged to use the Center regularly to improve their academic performance no matter what their skill level or class standing. Students are also encouraged to attend events sponsored by the Center, such as contests and community service projects.

The Student Center for Academic Achievement is located in the Library Complex (LI), UM3133, across from the University Library and hours vary. Call 510-885-3674 or visit our website for information regarding hours, specific tutoring times, workshop dates, event information, or to schedule an appointment.

Student Services Operation for Success

The Student Service Operation for Success (SSOS) is funded by the U.S. Department of Education. The SSOS program began in late 2011 and provides a full range of academic support services, counseling and cultural activities directed at historically underserved Asian American and Pacific Islander students. California State University East Bay is designated as an Asian American Native American Pacific Islander Serving Institution (AANAPISI). SSOS promotes academic success for Asian American and Pacific Islander students in college and helps students be career ready when they graduate. The program's services include: Peer Mentorship, Academic Tutoring, Student Club Sponsorship, Leadership Class, Asian and Pacific Islander themed campus events, Academic Lecture Series, Financial Aid Workshops, Career Readiness Workshops, SSOS Workshops and more.

To apply to the SSOS Program or to find out more about its services, email us at ssos@csueastbay.edu, call 510-885-SSOS (7767), or visit our office at ST 120. Additional information can also be found on the website at: <http://www20.csueastbay.edu/academic/academic-support/ssos-aanapisi/index.html>

Accessibility Services

Accessibility Services provides academic accommodations and support services to address the individual needs of students with permanent disabilities or temporary disabling conditions. Students with documented disabilities and functional limitations are eligible for services designed to provide equivalent access to general campus and classroom programs and activities. Accessibility Services also offers campus referrals for advising, counseling, transportation, and employment needs.

At the Hayward Hills campus, Accessibility Services is located in the Library Complex (LI 2400) and can be reached by phone or TDD at 510-885-3868. At the Concord Campus, it is located in the Academic Services Building, room 113 (Tel. 925-602-6716; TDD 925-602-8616). The staff of Accessibility Services is committed to ensuring the rights and promoting the dignity, self-awareness and self-advocacy of students with disabilities throughout the university. They value the diversity of the Cal State East Bay student body and work with the faculty, staff, and administration to create and maintain an inclusive environment where individuals with disabilities have full and equal access to all university programs.

To learn more about Accessibility Services, including information about their services, policies, resources and the ADA faculty handbook, visit Accessibility Services website.

Activities

Cultural Activities

Art, music, and theatre and dance engage, enrich and vitalize society, and are central of the educational mission of the University. They present a variety of exhibitions and performances throughout the year, showcasing the work of students and faculty, and sometimes staff and outside guests. Details are available from the departments, or at: <http://www.csueastbay.edu/arts>.

See Cal State East Bay's Academic Calendar for current events.

Intercollegiate Athletics, Instructional, Intramural and Recreational Programs

Cal State East Bay sponsors intercollegiate athletic programs for both men and women through the Department of Intercollegiate Athletics. The university is a member of the NCAA in Division II. Teams compete in the California Collegiate Athletic Association (CCAA). The sports offered include basketball, soccer, cross country, outdoor track and golf for men and women, plus baseball, softball, women's swimming, women's volleyball and women's water polo.

The university encourages you to participate in some form of physical activity. In addition to the program of intercollegiate athletics, opportunities exist for you to participate in instructional, intramural, and recreational programs. The Department of Kinesiology offers for credit instructional programs in sports, games, and exercise. The Department of Recreation and Community Services offers instructional programs in outdoor activities. The Recreational Activities Program, sponsored by the Associated Students, provides competitive and recreational opportunities during fall, winter, spring, and summer quarters.

The university has two swimming pools, two racquetball courts, a martial arts facility, a basketball/multipurpose gymnasium, a dance studio, a soccer stadium, a track, a baseball diamond, a softball diamond, and a multipurpose practice field. Information regarding programs should be obtained from the Department of Kinesiology (885-3061). Groups interested in renting the facilities should see the Office of Facility Reservations and Rentals web site for more information. Student clubs or organizations interested in reserving facilities should contact the office of Student Life (885-3657).

The California State University is committed to providing equal opportunities to men and women CSU students in all campus programs, including intercollegiate athletics. Information concerning athletic opportunities available to male and female students and the financial resources and personnel that Cal State East Bay dedicates to the men's and women's teams may be obtained from the Athletic Director, Department of Intercollegiate Athletics, TR 900, 885-3038.

Admission

The Office of Admission is responsible for all domestic admission services for new students. International students on F or J visas (and applicants with transcripts issued by schools outside the United States) are served by the International Admissions Office.

All applicants should use the student online self service portal MyCSUEB at <https://my.csueastbay.edu> to check admission status and required documents. For complete information, see the Undergraduate Admissions chapter.

International Student Information

All matters pertaining to the admission of international students are handled by the International Admissions Office. Students from other countries should consult with the International Admissions Office regarding visas, eligibility for employment, and any special academic requirements. (See "Are there special admission and eligibility requirements for international students?" in the Undergraduate Admissions chapter.)

Career Preparation

Academic Advising and Career Education (AACE)

AACE provides, in addition to advising, counseling, information and employment services to assist students in transitioning from the university to graduate school or the professional workplace. These services include career advising and coaching, career exploration and assessment, occupational information, job search assistance, and employment information and referral. The office maintains a comprehensive Career Library with books, periodicals, videos, and online resources pertaining to job search, career guidance, and labor market information. A searchable online database of all books in the AACE Library is available on its website.

AACE offers regularly scheduled walk-in hours for resume critiques and career-related questions. Appointments are also available for longer counseling sessions. In addition, career assessments are available in AACE and on the AACE website to provide personal assessment and occupational information.

AACE offers workshops throughout the year, at both the Hayward Hills and Concord campuses. Subjects include resume writing, interview techniques, finding an internship, and personal skills assessments. Workshop and event schedules are listed on the website and in the Events Calendar. Calendars are available in AACE, online, and at eight "Career Corner" locations on campus.

Employers conduct on-campus interviews for graduating seniors and alumni in the fall, winter, and spring quarters. Participants are encouraged to attend an orientation session, either online or in the Center, before registering for interviews.

AACE hosts job fairs throughout the academic year for all undergraduates and graduates to explore career options and employment opportunities. Job fairs feature employers from local, national, and worldwide organizations. AACE also sponsors targeted recruitment events with a specific career or employment focus.

AACE maintains an online job database listing hundreds of part-time, full-time, temporary, and seasonal jobs and internships.

Cal State East Bay alumni and other working professionals in a variety of career fields provide CSUEB students with valuable career exploration information by telephone, e-mail, or in person. These "Career Contacts," available on the AACE website, offer valuable insight into their career fields and experiences.

AACE's website (www.csueastbay.edu/aace) provides 24/7 access to information about its services, workshops and events, major and career information, job listings, resume and interviewing guidelines, and other career resources. Students can search for jobs, obtain information about occupations and career fields, participate in the On-Campus Interview program, and view the calendar of upcoming career workshops and job fairs.

Cooperative Education

The goal of the Cooperative Education program is to enrich your educational experience by demonstrating the relevance of university study to the world of work and by providing on-the-job experience that will make interns attractive to future employers after the degree is completed.

Students have completed internships in private businesses and public and non-profit agencies, including I.R.S./C.I.D., Shaw Environmental, P.G. & E., and many more.

Normally, a co-op experience should begin during the sophomore year or later. The work schedule varies depending on the needs of the employer. Some students are offered employment with their co-op employer when they graduate.

To participate in the program, students must have at least a 2.0 GPA, be in good academic standing, and be enrolled as a regular student in the university. To register in a Co-op Ed course, students must meet the requirements of the Cooperative Education program and the academic department. Co-op courses are numbered 3898 for undergraduate students and 6898 for graduate students. If a Co-Op Ed course is available, it will be listed in the *Class Schedule*. Students must complete forms in AACE, as well as register for the course in order to receive credit.

In addition to Co-op Ed courses, many departments offer regular courses in internships or field practice in which students may enroll to receive academic credit for their work.

Note: International students on F-1 visas who are interested in registering for Co-op, internship, or field practice courses should contact the Center for International Education (510-885-2880) to discuss employment authorization for such courses.

Concord Campus Student Services

The Concord Campus provides a full range of student support services designed to enhance students' abilities to succeed in their academic endeavors. The Academic Services (AS) Lobby serves as a one-stop center for students to complete registration, records and enrollment services functions on the Concord Campus.

Additionally, the following student services are available on the Concord Campus: Associated Students, Academic Advising and Career Education, Accessibility Services, Bookstore, Cashier, Clubs and Organizations, Commencement, Commuter Shuttle, Financial Aid, New Student Orientation, Personal Counseling, Pre-Admissions Counseling, Student Health Services, Transfer Center, Tutoring and University Police.

For assistance, or information on any of these services, call (925) 602-6700 or visit <http://www20.csueastbay.edu/concord/>

Credentialing Services

The Credential Student Service Center (CSSC) handles the department admissions processing for all state-approved credential programs housed in the College of Education and Allied Studies. Additionally, CSSC assists in department admissions processing for specific non-credential graduate programs as noted on the program's web page. Upon completion of the state-approved credential program, CSSC credential analysts file the official recommendation for the credential document. The final decision to issue or deny a credential is a decision of the Commission on Teacher Credentialing. CSSC staff members provide guidance on credential requirements at the university and referral services for all other credential questions and concerns. For information concerning teacher preparation programs and other credential programs at Cal State East Bay, including the pass rate on teacher certification examinations, contact the CSSC Director by calling 510-885-2272. Information about credential program offerings and details about the department admissions processing handled through CSSC may be found online at the Credential Student Service Center website. The Credential Student Service Center is located in the Art and Education Building (AE 235).

Financial Aid Services

The Financial Aid Services department coordinates all university-administered financial aid programs. You may obtain financial aid information and assistance in the Student Enrollment Information Center (1st floor of Student Services and Administration Building).

Financial Aid Applications:

The Free Application for Federal Student Aid (FAFSA) is available on the web at: www.fafsa.ed.gov. You are strongly encouraged to complete the FAFSA each year by the March 2 priority filing date. The FAFSA helps determine your eligibility for grants, Work-Study, and loans. Eligibility for limited funds is determined by financial need and FAFSA priority filing. If you are a California resident, you may also apply for a Cal Grant by completing the FAFSA and asking your school to submit your grade point average (GPA) to the California Student Aid Commission by March 2 for high school/college students, and September 2 for California Community College transfer students. AB540 students may apply for California State Aid, including Cal Grants, by completing the Dream Application. Information on the Dream Act and a link to the Dream Application may be found at: [Dream Act and Application](#)

Note: The federal Military Selective Service Act requires most males between the ages of 18 and 25, who reside in the United States, to register with the Selective Service System. If you are subject to the Act and fail to register, you are ineligible to receive

all student aid funded by the federal student aid, state sources, or a public post-secondary institution. See "Military Selective Service Act" in the Appendix for additional information.

Academic Progress:

Financial aid recipients are required to meet academic and degree progress standards set forth in the Satisfactory Academic Progress Policy. The Financial Aid Office measures academic progress at the end of each term after grades are finalized. You may review the full policy at: Satisfactory Academic Progress Policy.

Loans and Grants:

If you demonstrate financial aid need, you may be eligible for loans or grants. Consider one or more of the following programs: Pell Grant, Federal Supplemental Educational Opportunity Grant, State University Grant, Cal Grant A or B, Work-Study, Perkins Loan, Direct Subsidized Loan, Parent PLUS Loan, and Graduate PLUS Loan. You may qualify for Middle Class Scholarship, Unsubsidized Direct Loan, Parent PLUS Loan, and Teach Grant without demonstrating need. Graduate Students are ineligible for Subsidized Direct Loans.

Work-Study Program:

Work-Study is earned through part-time employment in on-campus and certain off-campus jobs. Federal Work Study (FWS) is a form of financial aid largely provided by federal funding. A student must apply for financial aid each year to become eligible for the award, or to keep working in their current Work Study job. Eligible FWS students earn money by working a limited number of hours per week at a pre-approved FWS site location. Employment may be found on or off campus with employers that have arranged in advance to offer FWS positions to CSUEB students. If you are eligible, Work-Study employment can assist you in meeting your educational expenses without incurring indebtedness. Financial Aid will use the information provided on your FAFSA to determine your eligibility for Work-Study.

Scholarships:

You may obtain information on scholarship opportunities from Financial Aid and from major departments. Both on and off-campus scholarship information is available on the university's web site. Admitted Students may use the new on-line Pioneer Scholarships application to apply for all East Bay scholarships.

Short-Term Loans:

Financial Aid and Student Financial Services also administer the University's short-term Emergency Loan Program and the intermediate term Foreign Student Loan Program. You are not required to apply for financial aid to receive these interest free loans. Emergency Loans may not be used to pay university charges and are usually limited to \$300 with repayment due in 30 days. If you are a non-U.S. citizen, you may apply for a maximum of \$200 with repayment due within 9 months

(Also see "Fee Waivers for Senior Citizens" under the University website *Special Program Registration Procedures - Over Sixty Program*)

You may obtain additional information on eligibility requirements for financial assistance, and the criteria used to distribute aid among eligible applicants who enroll at *Cal State East Bay*, from the Financial Aid Department.

Graduation

Students must apply for graduation by the end of the Late Add period of the quarter prior to the term in which they intend to graduate (late filing causes graduation to be delayed.) Undergraduate students should consult their academic department regarding fulfillment of major requirements, and the Academic Advising and Career Education Center regarding the fulfillment

of General Education requirements. For complete information, see the Undergraduate Degree Information chapter. Graduate students should consult with their faculty advisor. Final graduation evaluation or "check-out" is typically completed within two months following the posting of grades from the student's final quarter of attendance. Diplomas are typically printed and mailed 4-6 weeks following the posting of the degree.

Housing and Residential Life

Enrolled students have the option of living on campus in the Pioneer Heights Student Apartments/Suites. First-time freshmen meeting the established criteria receive priority when assignments are made. (See below.) All other space reservations are provided on a first-come, first-served basis.

On-Campus Housing (Pioneer Heights)

Located conveniently on campus, the Cal State East Bay Student Apartments/Suites are comfortable and affordable. Living in a community designed to meet the needs of students can help you in gaining the most from your university experience.

The Pioneer Heights on-campus apartments and suites are spacious, attractive, and fully furnished. The apartments feature single (for upper division students or students who are 21 or older) or double bedroom accommodations, a full kitchen, living and dining area and one or two bathrooms. The suites feature double bedroom accommodations, a kitchenette with refrigerator and microwave oven, a living and dining area and two bathrooms. High-speed Internet access and basic cable is included as part of the rent. Phone service is available in each unit. Study, laundry, and recreation rooms with television, billiard and ping-pong tables, are among the amenities with the Recreation and Wellness Center conveniently located across the street. Outdoors, you'll find lighted basketball courts, as well as barbecue and picnic areas. Convenient meal plans are required for all students living on campus making it easy to save time and have fun sharing a meal with friends.

The Residential Life Program was developed as an integral part of your educational experience and provides a climate where the living atmosphere complements the educational mission of the university. Professional staff and trained student assistants work together to develop educational, cultural, social, leisure, and personal development programs that serve to enhance academic learning.

Housing applications are accepted year round. Applicants are notified once the official Housing License Contract is available, typically in early June. Students who submit their completed Housing License Contract and payment by July 1 will receive priority when assigning space. It is important to note that the university's admission application is separate from the housing application.

Incoming first-time freshmen admitted to the University and who submit their Housing License Contract and payment by July 1 receive priority when assigning space. Additional information regarding payment plans and financial aid assistance is provided at the Housing website: <http://www20.csueastbay.edu/students/campus-life/housing/index.html>

For more information contact Student Housing at 510-885-7444 or stop by Lassen Hall.

Off Campus Housing

Identifying Off-Campus Housing in the East Bay can be challenging and we want to ensure that you have a few resources to help you through the process. Please give yourself ample time-about two to three months to search for Off-Campus Housing. The *Student Housing & Residence Life* website will assist you in your transition off campus and help you understand your rights and responsibilities in the greater community. Browse this great resource to start your search and learn about other off-campus housing information! Remember, you have to be motivated and actively looking when finding Off Campus Housing.

International Education and Student Exchange Programs

Center for International Education

The Center for International Education (CIE) provides a range of services to international students and scholars that are designed to facilitate their transition to a new environment and to optimize their educational opportunities while at Cal State East Bay.

These services include:

1. pre-departure advising
2. orientation for new students
3. assistance in understanding and complying with university rules and regulations
4. counseling designed to help students adjust to life in the USA
5. advice on relevant immigration regulations
6. guidance for students regarding legal employment while in student status
7. referrals for on-campus support services
8. workshops on topics of special interest to international students.

Study Abroad Programs

The study abroad opportunities offered through California State University, East Bay allow Cal State East Bay students to study overseas for one semester or academic year and earn academic credit towards their degree. The experience leads to personal growth and acquisition of valuable skills, such as language fluency and cross-cultural understanding. Financial aid (except Work-Study) may apply, and study abroad scholarships are available.

CSU International Programs: Students can study abroad for a full academic year through the CSU system.

Bilateral Programs: Bilateral exchange programs are one-to-one exchanges with another university overseas. Program length varies from one quarter to a full academic year.

International Student Exchange Program (ISEP): Through ISEP, students have the opportunity to study in over 120 study sites around the world for a semester or a full academic year.

Summer London Program: The British Documentary Experience is a study abroad program designed to give major and non-major undergraduate students a practical and powerful educational opportunity to study the history and practice of documentary filmmaking in the United Kingdom.

National Student Exchange Program

Cal State East Bay students can study at another university in the United States or Canada through the National Student Exchange Program (NSE). NSE offers study opportunities in diverse university settings and provides access to a wide array of courses and programs. Students may use financial aid. Coursework applies to their degree.

For additional information on the Center for International Education's services or the programs listed above contact:

Center for International Education
LI 2550
Tel: 885-2880; Fax: 510-885-2787
Email: cie@csueastbay.edu
Web: www.csueastbay.edu/CIE

Orientation

Cal State East Bay offers orientation and advisement programs prior to each quarter to introduce new students to the university and to prepare students for registration. Through special programs planned for freshmen, transfer, and graduate students, *Orientation* provides essential information about degree requirements, campus resources, and registration. During *Orientation*,

new students receive academic advising and learn about the campus from current students. Tours of the campus are also available. Student Life and Leadership Programs recognizes that students enter the university from a variety of backgrounds. As a result, special orientation activities are offered to address the concerns of freshmen, transfer, re-entry, and graduate students and their guests. First time freshmen who attend *Orientation* for fall quarter are allowed to register before all other students.

Both the Hayward Hills and Concord campuses offer orientation programs. Detailed information about *Orientation* is mailed to all individuals who have been admitted. Students awaiting final notice of admission may attend *Orientation*, although attendance does not constitute admission by the university.

Specific information about *Orientation* is mailed directly to all new students and is included in the quarterly *Class Schedule*. Additional information about orientation programs is available through Student Life and Leadership Programs, Student Services Hub 1351, 510-885-3657, email: studentlife@csueastbay.edu; website: www.csueastbay.edu/slif. The *Class Schedule* may be viewed online at: www.csueastbay.edu/schedule/.

Outreach

Outreach services to students in high schools and community colleges are provided through Enrollment Management. In addition to on-campus tours and events, pre-admission advising (both on-campus and at high schools and community colleges), attendance at college fairs, and other efforts, Enrollment Management has a comprehensive communications program for prospective students.

All programs and activities are designed to promote interest in Cal State East Bay and to encourage application and matriculation to the university. For more information about outreach programs, to schedule a tour or a pre-admission advising appointment, call (510) 885-2556 or e-mail to admissioncounseling@csueastbay.edu. To schedule a tour or pre-admission advising appointment, call (510) 885-2556.

Safety Programs

Cal State East Bay enjoys low crime statistics due to an on-campus, professionally trained police department which delivers public safety services to the campus community. The University Police Department programs such as the Bicycle Patrol and Escort Service provide Cal State East Bay with a community-oriented form of police services, which allows for personal interaction between police personnel and members of the university community while providing an increased level of crime prevention patrol on campus grounds.

The department offers several on-going programs available to staff, faculty, and students on the following topics: alcohol and drug awareness, acquaintance rape and awareness, and self-protection for women. The department also distributes a wide variety of crime prevention materials and offers vehicle lockout, battery failure, fingerprinting, and lost and found assistance.

The following information may be obtained from the University Police Department, (510) 885-3791:

- Information concerning Cal State East Bay policies, procedures, and facilities for students and others to report criminal actions or other emergencies occurring on campus.
- Information concerning Cal State East Bay's annual campus security report and annual fire safety report. This information is also available on the CSUEB website at Campus Security Report.
- Information concerning the prevention of drug and alcohol abuse.

Student Clubs and Organizations

More than 120 student clubs and organizations are active at Cal State East Bay. They encompass a broad range of interests, including academic, cultural, recreational, religious, special interest and Greek organizations (fraternities and sororities). These groups also offer important opportunities for personal growth and development, as well as valuable educational experiences

beyond the traditional classroom setting. Student clubs and organizations sponsor many special events, including lectures, films, music, cultural programs, and social activities each quarter.

The Student Life and Leadership Programs staff provides support and consultation to student clubs and organizations in planning programs and events; fund raising, publicity and promotion; and developing service projects and cultural programs. The staff also assists students interested in forming new student organizations or participating in leadership development programs.

Fraternities and sororities actively contribute to campus life at Cal State East Bay. The Greek system includes five social sororities, six social fraternities, five cultural fraternities, six cultural sororities, two co-ed academic fraternities, and one co-ed community service fraternity. In addition to offering networking and social activities, fraternities and sororities encourage scholarship, leadership, community service, and affiliations that last a lifetime. Student Life and Leadership Programs provides support and assistance to individual chapters, as well as to the Greek governing councils.

Getting involved in student clubs and organizations is an excellent way to meet other students, connect and engage with the campus community, develop leadership skills, and pursue special interests. The university encourages students, faculty and staff to become active and involved in student clubs and organizations. More information is available from Student Life and Leadership Programs located in the University Union, Room 2011, 510-885-3657; email: studentlife@csueastbay.edu; website: <http://www.csueastbay.edu/slif>.

Alumni Association

The Cal State East Bay Alumni Association was formed in 1961 to establish a lifelong connection with the University's alumni and encourage their active participation in university life. The Association hosts alumni events throughout the Bay Area and beyond, collaborates with University partners to support career programs for alumni, offers membership benefits, provides financial support for the university magazine and Alumni Scholarship, and honors distinguished alumni each year in multiple ways.

The Alumni Association plays an important role in representing and promoting the alumni of California State University, East Bay while supporting initiatives that strengthen the University and the Pioneer alumni network. The volunteer board of directors and staff of the Association work closely with the Office of University Advancement and the Office of the President to increase alumni involvement through volunteer, advisory and leadership roles; fundraising and personal financial support; advocacy; and participation in university events.

Alumni who wish to get involved should contact alumni@csueastbay.edu or 510-885-2877. Follow the Alumni Association on the web, join the private LinkedIn group and become a fan on Facebook.

Leadership Development Programs

Student Life and Leadership Programs and the Division of Planning, Enrollment Management, and Student Affairs offer students the opportunity to enhance their leadership skills through a variety of seminars, classes and conferences presented by campus and community leaders. Through these leadership programs, students gain the insight and skill to assume a leadership role on campus, in their career or in the community; build alliances with faculty, staff, alumni and community leaders; and enhance their future leadership potential.

Various leadership programs, depending on the student's class level and interest, are offered fall, winter, and spring quarters and are open to all Cal State East Bay students. For additional information, contact Student Life and Leadership Programs in the University Union, Room 2011, 510-885-3657; email: studentlife@csueastbay.edu; website: <http://www.csueastbay.edu/slif>.

Student Enrollment Information Center

The Hayward Campus Student Enrollment Information Center is located on the first floor of the Student Services and Administration Building. It provides general information and forms related to admission, financial aid, records and registration,

VA benefits, and graduation evaluation. The Student Enrollment Information Center is open Monday through Thursday from 8:30 a.m. to 5:30 p.m.; and Friday from 10:00 a.m. to 5:00 p.m. Extended hours during the first five days of instruction each quarter are 8:00 am to 6:00 pm except Fridays when the closing time is 5:00 pm. The Cashier's Office, also located on the 1st floor of Student Services and Administration Building next to the Student Enrollment Information Center, is open Monday from 8:30 a.m. to 6:00 p.m.; Tuesday through Thursday from 8:30 a.m. to 5:00 p.m.; and Friday from 9:30 a.m. to 4:30 p.m. Students seeking service from departments should contact those offices directly.

The Concord Campus Academic Services Lobby (925-602-6700) provides the same services as the Hayward Campus, with the exception of graduation evaluation. The Academic Services Lobby is open Monday through Thursday, 9:00 a.m. to 6:30 p.m.

Academic Advising and Career Education (AACE) is open 9:00 a.m. to 6:00 p.m. Monday through Thursday, and until 5:00 p.m. on Friday for questions regarding services and to schedule advising appointments. Academic advising is available for all undergraduate students regarding their non-major degree requirements. Drop-in advising is available Tuesday and Wednesday, 10:00 a.m. to 12:30 p.m., and 3:00 p.m. to 5:30 p.m. Appointments may also be scheduled in advance and, if needed, 6:00 p.m. appointments are available. Students should bring all their advising records including their most recent general education evaluation or degree audit when they come for advising. Please call ahead (510-885-3621) for any current changes to advising hours, or go to www.csueastbay.edu/aace.

The Concord Campus Academic Services Office also provides academic advising. Please call (925) 602-6700 for more information or visit the Concord Campus website at: www.csueastbay.edu/concord.

Student Government

Associated Students, Inc.

Phone: 510.885.4843

<http://www.csueastbay.edu/asi>

As a 501.3c non-profit auxiliary corporation of the CSU, the Associated Students, Inc. (ASI) is the official voice of the students of CSU East Bay. The ASI represents and advocates on behalf of the interests, needs, and concerns of our diverse and dynamic student body, and provides students with the services and resources to supplement and support their college experience. Each Spring, elections are held to fill the Board of Directors which consists of 15 students representing all the colleges and executive offices.

Business Office

Located in Suite 314 of the Original University Union, ASI Staff work with students to fulfill their organizational needs by providing special services to recognized student clubs and organizations.

Programming

ASI Presents produces a variety of special programs and events to meet the social, cultural and entertainment needs of the CSU East Bay community.

Recreation Program

ASI's newest facility, the Recreation and Wellness Center (RAW), offers a full program in campus recreation, outdoor education, environmental education programs, fitness, and wellness program. Students are encouraged to participate in intramural recreation programs for fun and health.

University Union

The Associated Students, Inc. operates the University Union Program which features two University Union Facilities. Located within the University Union are food service operations along with our games room, lounge areas, study areas, and the Art Gallery. Also located within the facility is the Diversity Center (offering multicultural programs and social justice issues awareness), and the Office of Student Life and Leadership (oversees student clubs and organizations and offers the leadership program). Rooms are available to all students, faculty, and staff for meetings and events. Contact the Reservations Desk at 510.885.7245 to make arrangements.

Student Media

The university newspaper, *The Pioneer*, is produced in the Department of Communication. Student involvement in production of *The Pioneer* includes writing, editing, graphics, photography and advertising. *The Pioneer* is also published on the Internet. For more information about *The Pioneer*, call *The Pioneer* office at 510-885-3175. For more information about the advertising agency which sells ads in *The Pioneer*, call the agency office at 510-885-3526.

Student Health and Counseling Services

Student Health and Counseling Services (SHCS) provides quality health care by board certified, licensed, and credential health care providers and counselors to current regularly enrolled CSUEB students. Our goal is to assist you in achieving and maintaining optimal health while pursuing your academic and career goals.

Student Health and Counseling Services hours of operations are Monday through Wednesday and Friday from 8:30 a.m. to 5:00 p.m., Thursdays from 10:00 a.m. to 5:00 p.m. Hours may vary during Summer Quarter and Quarter Breaks. Students can be seen on an appointment basis. Same day appointments are available for urgent needs. Limited services are also offered during quarter breaks. Medical and counseling services are also available at the CSUEB Concord Campus. After hours and weekend mental health phone crisis counseling is available by calling our main number (510) 885-3735, and choose option "2". For more information, please call (510) 885-3735 or visit www.csueastbay.edu/shcs.

Funded by your student health fees, SHCS provides an extensive array of outpatient health and mental health care services at no or low cost to students. General medical visits with board-certified, licensed medical doctors, nurse practitioners, nurses, and medical assistants for the care, evaluation, and treatment of acute illnesses and injuries, health education and family planning are available. SHCS also provides confidential individual, couples, and group counseling. All counselors are licensed or pre-licensed professionals.

Services offered at SHCS are Health Education, Hearing Tests, Immunizations*, Laboratory*, Massage Therapy*, Orthopedics, Personal Counseling, Pharmacy*, Physical Exams, Physical Therapy, Psychiatry, Radiology (X-Ray)*, Reproductive Health Services*: Birth Control, HIV Testing, STI Testing & Treatment. *Fees may apply

To provide the holistic experience of college health, the Wellness Center also offers a Relaxation Room and a Wellness Room with health education activities and information. The Wellness Center is located in the Recreation and Wellness (RAW) Building. For more information visit www.csueastbay.edu/raw.

Confidentiality

All medical and counseling information is confidential by law and will not be released without your written consent.

Accreditation

SHCS is accredited by the Accreditation Association for Ambulatory Health Care, Inc. The SHCS facility and services meet the national standards for providing the highest quality of health care available.

Peer Advocates for Wellness (PAW)

PAW is an opportunity for CSUEB students to become involved with SHCS. Under the supervision of Health & Wellness Services, PAW interns are trained peer health educators who provide resource information, peer support, and outreach about health and wellness issues. For more information, email paw.csueb@gmail.com.

Student Health Advisory Committee (SHAC)

SHAC advocates for the health needs of students and advises the SHCS Director and University President on programs, scope of services, and hours of operation for SHCS. For more information, email shac.csueb@gmail.com.

Insurance

Students are strongly encouraged to carry outside coverage for after-hours care, emergency situations, or when referrals to outside providers are needed. For more information about insurance options, visit www.coveredca.com, www.csuhealthlink.com, or email csuebhealthinsurance@csueastbay.edu.

Testing Services

The Testing Office provides standardized testing and scoring for students, faculty, and administration. The office administers a variety of tests including placement and proficiency tests for Cal State East Bay and other CSU campuses and national admission and matriculation tests for undergraduates and graduates.

There are two test requirements of which all students should be aware:

1. *The EPT and ELM (English Placement Test and Entry Level Math Test) are required of all new undergraduates before enrollment except for a few categories of exemptions. You may be exempt from the EPT/ELM requirements if you can meet the waiver requirements. (See "Which undergraduate placement examinations do I need to take?" in the Registration chapter.) You will be mailed an EPT/ELM test application upon admission to Cal State East Bay. Contact the Admissions Office, Academic Advising and Career Education, or on the Testing Office website.*
2. The Writing Skills Test (WST) must be taken by all undergraduate students at the beginning of the junior year, and by all graduate students upon admission to a program unless they elect to meet the requirement through coursework. For test dates and registration information, Please check the Testing Office website, and select WST. (See "University Writing Skills Requirement" in the Undergraduate Degree Information chapter, and in the Graduate Degree Information chapter).

Other tests for Cal State East Bay students to be aware of include the following:

The State Education Code State Education requirements in U.S. History, the U.S. Constitution, and California State and Local Government (CODE) in may be met by coursework or a special set of tests developed by the College Board called CLEP. See the Undergraduate Degree Information chapter for detailed information regarding CODE requirements. For additional information and registration, please contact the Testing Office at (510) 885-3661.

Other tests administered by the Testing Office:

The ACT (American College Test) and the SAT I (Scholastic Aptitude Test), one of which is required for entering freshmen and transfer students with less than 90 acceptable quarter units. Test results are not required of students earning high school grade point averages of 3.00 or higher (3.61 for nonresidents). Information about other tests administered on campus is available on the Testing Office website.

The MAT (Miller Analogies Test) is required by some graduate departments. See graduate program chapters in this catalog for further information. Additional information can be found by contacting the Testing Office at (510) 885-3661.

For information about the CBEST (California Basic Educational Skills Test), CLEP (College-Level Examination Program), GMAT (Graduate Management Admission Test), GRE (Graduate Record Examinations), LSAT (Law School Admissions Test), MCAT (Medical College Admission Test), TOEFL (Test of English as a Foreign Language), CLAD/BCLAD (Bilingual Crosscultural Language and Academic Development Examinations), RICA (Reading Instruction Competence Assessment), and PRAXIS (Professional Assessments for Beginning Teachers), contact the Testing Office at (510) 885-3661. For more information see Other Tests.

Transcripts

Students may obtain official transcripts of coursework taken at Cal State East Bay (including continuing education and special session courses) from the Office of the Registrar. Refer to the transcripts section on the university website for current costs and online ordering procedures and costs.

For transcript requests that arrive via the mail, the request should include: name, other name(s) which may appear on records, NetID or Social Security number, address, dates of attendance, and the complete address to which the transcript is to be sent. The university cannot be responsible for the consequences of failure to supply any of the above information. Mailed requests must also include a check (payable to Cal State East Bay) for the current fee. Please do not send cash with mailed requests. Address the request to Office of the Registrar, Transcript Request.

Students with financial and judicial holds placed by the university, or with academic, document, library, equipment, or other obligations to Cal State East Bay, are not permitted to receive transcripts or to request transcripts to be sent to other institutions.

Transfer Credit

New undergraduate transfer students will automatically receive an official GE evaluation of all transfer courses from the Office of the Registrar before the end of their second term after admission. In consultation with a GE advisor, they can subsequently track their degree progress through the online audit in MyCSUEB. Contact the Office of the Registrar for any questions about the online audit

Transfer Information

See "Academic Assistance," "Orientation," and "Career Preparation" sections in this chapter. Also please see the chapter Undergraduate Admissions and Degree Information.

Transportation Services

Cal State East Bay offers several commuter services via the Alternative Transportation Office, (510) 885-3790.

A free shuttle service is available between the Hayward campus and the Hayward and Castro Valley BART stations for students, staff, and faculty. The shuttle bus schedule is available on the Web at: www20.csueastbay.edu/af/departments/parking/alt-trans/csueb_shuttle.html. In addition, the Alternative Transportation office coordinates the CSUEB Faculty and Staff Van Pool program, an on-campus Zip car program and various "guaranteed ride home" programs. Call the Alternative Transportation Office for any other questions concerning current services or for more information on possible service expansion.

If you are interested in sharing a ride to Cal State East Bay, a student carpool database and a staff/faculty carpool database are available. Free carpool matching is available by logging on to: www.rides.org. (Click on "commute options," then choose "carpool partners".) You may also call the Alternative Transportation Office. (Home addresses are kept confidential and all other information will be used for carpool purposes only.) Carpool matching is available for both the Hayward Hills and Concord campuses.

The Commute Information Center (CIC) sells passes for AC Transit and has detailed schedules of the campus shuttle, BART, and AC Transit bus #60. The CIC is sponsored by the Associated Students and the Alternative Transportation Office.

University Honors Program

There is a University Honors Program open to any student who meets the criteria for admission. Individual departments may also develop honors programs. Departmental Honors Programs are upper division programs designed to provide special courses and advanced, independent reading and research for superior students in the individual majors. Contact the chair of the department for additional information.

Department Information

University Honors Program
Academic Programs and Graduate Studies
Student Services and Administration Building, 1st Floor
Phone: (510) 885-3286
E-mail: bridget.ford@csueastbay.edu

Director: Bridget Ford (History)

Program Description

The University Honors Program provides outstanding students the opportunity for academic challenge through the completion of specialized courses, seminars and projects under the direction of faculty mentors. University Honors Students in good standing gain priority registration for most university classes, attend educational and social events with other Honors Students, have exclusive use of the Main Library's University Honors Study Room, and may be considered for periodic awards and scholarships. University Honors Students also receive recognition on their official transcripts and diplomas, and enjoy special acknowledgement at both the Honors Convocation and Graduation ceremonies.

Admission

Admission to the program is open to:

- a. undergraduate students admitted to the university with a minimum 3.60 GPA, and
- b. students who have maintained a 3.60 GPA in their last 36 quarter (or equivalent semester) units of baccalaureate-level coursework. In addition, eligible students must have satisfied the EPT/ELM requirements.

Maintaining Membership

To remain in good standing in the program, students must complete at least one University Honors course per academic year with grades of "B" or better, and maintain a minimum GPA of 3.50 for all CSUEB coursework taken subsequent to being accepted to the University Honors Program. Students who fail to meet the maintenance requirements for two consecutive quarters will be dropped from the program.

Types of University Honors Courses

University Honors courses are of several types:

- a. regular classes in which the instructor agrees to design and grade a special extra project to be completed by the Honors student,
- b. one-unit seminar classes, restricted to University Honors students.

- c. independent study/research classes at the upper division level in which a University Honors student works closely with a faculty member on a project.

Graduation from Honors Program

Students must complete 20 University Honors units with a minimum GPA of 3.60 to graduate from the University Honors Program. University Honors students must be in the University Honors Program for at least one year and take the one-unit "Honors Seminar" to graduate from the program. "Honors" units will only be assigned upon completion of courses approved by the University Honors Program Director in which the student earns a "B" or better and completes an honors project to the satisfaction of the instructor of the course. University Honors courses may be in the student's major or minor, as well as in general education, and/or free electives. At least 8 honors units, however, must be taken outside the student's major. University Honors courses may not be taken "credit/no credit."

Priority Registration

Senior and Junior students in good standing in the University Honors Program shall have priority registration for most classes.

Special Recognition

University Honors students will receive special recognition at the Honors Convocation and/or at graduation. University Honors students will also receive recognition on their transcripts and their diplomas, as well as a certificate of recognition from the program.

Program Director

The director coordinates the development and maintenance of University Honors courses, as well as special learning/cultural events for University Honors students and faculty. The director tracks student progress and invites eligible students to join the program, giving notice to students who are failing to meet the maintenance requirements and removing students from the program who fail to meet the maintenance requirements after two quarters.

Veterans' Services

Educational allowances, benefit counseling, advocacy, discharge upgrading assistance, tutorial assistance, and social service referrals are available to veterans attending Cal State East Bay under the Veterans' Administration or Cal-Vet programs, and to dependents of service-connected disabled and deceased veterans.

A permanent GI bill providing college educational allowances and other benefits for veterans is now in effect. For information on eligibility and procedures, students may contact the Veteran Office at (510) 885-3669, or in person in the Student Enrollment Information Center, or the Veterans' Administration at (800) 827-1000.

Each quarter veterans and eligible dependents should contact the Veteran Office before the first day of classes and submit their forms requesting certification of enrollment for V.A. benefits. Students are also responsible for reporting any changes in enrollment to the Veteran Office and to the V.A. as they occur. See "What Determines a Student's Classification at Cal State East Bay?" in the Registration chapter for additional information.

Servicemember's Opportunity College

Cal State East Bay is a Servicemember's Opportunity College (SOC) and provides educational assistance for active duty servicemembers. SOC institutions offer the following benefits to servicemembers:

1. Admission procedures which ensure access to higher education for academically qualified military personnel;

2. Credit awarded for knowledge acquired through military experiences, if applicable to the servicemember's program of study;
3. Credit awarded for non-traditional learning, if applicable to the servicemember's program of study;
4. Acceptance of inter-institutional transfer credits, if they are appropriate for the servicemember's program and are consistent with the university's curriculum;
5. Residence requirements may be adjusted for military students who transfer, when there are other assurances of program balance;
6. Personnel with appropriate academic qualifications and experience administer and supervise SOC-related activities;
7. Educational services for veterans.

For information about the SOC program, contact the Veterans Affairs Coordinator.

Online Degree Programs

About Online Learning at CSUEB

California State University, East Bay offers a number of online learning options. These include:

- I. **Selected online classes** for enrolled students in one of two differing formats:
 - Online classes, in which 100% of the class communications and coursework are online, and exams are delivered either online via the Internet, on campus, or proctored at an off-site location.
 - Hybrid classes, in which some classroom meetings are replaced by online activities.
- II. **Online Bachelor's degree completion programs**, designed for enrolled and transferring students who have completed lower-division course requirements.

Success in online learning requires certain computer skills, as well as certain learning and class participation styles. Students should be:

- knowledgeable about creating, saving, uploading, and downloading electronic files and documents;
- experienced in the use of e-mail and the Internet;
- able to read and follow written directions carefully;
- willing to log into class at least three to four times a week;
- equipped with an up-to-date firewall and virus protection program installed on their personal computer;
- motivated self-starters with good time-management skills.

See the links below for more specific information about online classes and degrees.

Online Degree Program State Authorization

Note: State and federal laws require colleges and universities to be authorized to offer online degree programs in states other than their own. At this time, CSU East Bay may not be authorized to offer online degree programs for students residing in certain states. Please go to http://www20.csueastbay.edu/online/admissions-and-costs/state_authorization.html for further information.

Online Classes Offered this Quarter

You can view current online and hybrid course offerings at MyCSUEB.

Note: Please be sure to check the individual class "notes" for other possible important information about the class. To see the class "notes":

1. Click the green arrow for the class you wish to view;
2. Click the bright blue section number hyperlink [for example: 02-LEC(1234)] and scroll down to "Notes".

Online BA/BS Degree Completion Programs

A BA/BS Degree Completion Program is for anyone who has completed their lower division general education breadth requirements. All major requirements will be taken completely online.

Online Bachelors Degree Completion Programs

Majors and Options**Link to Department****Link to College**

Business Administration, B.S.	Department of Accounting and Finance, Economics, Management, Marketing and Entrepreneurship	College of Business & Economics
Ethnic Studies, B.A.		
<ul style="list-style-type: none"> Ethnic Studies, Asian American Studies Option, B.A. Ethnic Studies, Genders and Sexualities in Communities of Color Option, B.A. 	Department of Ethnic Studies	College of Letters, Arts, and Social Sciences
Hospitality and Tourism, B.S.	Department of Hospitality, Recreation and Tourism	College of Education and Allied Studies
Human Development, B.A.		
<ul style="list-style-type: none"> Human Development, Adult Development and Gerontology Option, B.A. Human Development, Early Childhood Development Option, B.A. Human Development, Women's Development Option, B.A. 	Department of Human Development and Women's Studies	College of Letters, Arts & Social Sciences
Recreation, B.S.		
<ul style="list-style-type: none"> Recreation, Recreation Management Option, B.S. Recreation, Recreation Therapy Option, B.S. 	Department of Hospitality, Recreation and Tourism	College of Education and Allied Studies

Online Master's Degrees

Online Master's Degree Programs and Options

Link to Catalog**Link to Department****Link to College**

Education, M.S.		
<ul style="list-style-type: none"> Education, Online Teaching and Learning Option, M.S. 	Online Teaching and Learning Degree Program	College of Education & Allied Studies
Educational Leadership, M.S.	Department of Educational Leadership	College of Education & Allied Studies
Health Care Administration, M.S.	Department of Public Affairs and Administration	College of Letters, Arts, and Social Sciences

Recreation and Tourism, M.S.

Department of Hospitality,
Recreation and Tourism

College of Education & Allied
Studies

Concord Campus, Majors and Options

Undergraduate Majors and Options, Concord Campus

Cal State East Bay offers a strong academic course of study with a real-world curriculum to prepare you for a lifetime of personal achievement and career success.

The University Catalog lists the program description, course names, numbers, descriptions, degree requirements, and career opportunities. The Department website gives detailed information about the academic department including degrees and programs, careers for majors, faculty information, course descriptions and departmental information.

Undergraduate Majors and Options, Concord Campus

Majors and Options	Link to Department	Link to College
<p>Business Administration, B.S.²</p> <ul style="list-style-type: none">• Finance Option• General Management Option• Marketing Management Option	Departments of Accounting and Finance, Economics, Management, Marketing and Entrepreneurship	College of Business & Economics
Liberal Studies, B.A. ^{1, 2}	Department of Liberal Studies	College of Letters, Arts & Social Sciences
<p>Nursing, Pre-Licensure Option, B.S.</p> <ul style="list-style-type: none">• Pre-Nursing and Pre-Licensure Options	Department of Nursing and Health Sciences	College of Science
Psychology, B.A. ²	Department of Psychology	College of Science
<p>Sociology, B.A. ²</p> <ul style="list-style-type: none">• Social Services Option• Sociology Option	Department of Sociology and Social Services	College of Letters, Arts & Social Sciences

Footnote

1. The upper division portions of these majors can be completed via the Program for Accelerated College Education (PACE).
2. This is a degree completion program. The first two years of the program must be completed at Cal State East Bay's Hayward campus or other accredited college or university.

Course Descriptions

Accounting

ACCT 2251 - Introduction to Financial Accounting

Units: 4

Introduction to financial accounting concepts and procedures; interpretation and analysis of financial statements for operating, investing, and financing decision-making. *Prerequisites: Satisfactory completion of Entry-level Mathematics (ELM) requirement, and either credit for intermediate algebra or a satisfactory score on the Mathematics Diagnostic Test (MDT).* Not open to students with credit for ACCT 2210.

ACCT 2253 - Introduction to Managerial Accounting

Units: 4

Use of accounting information for managerial decision-making in planning and control including cost classification; estimation and analysis; job-order, variable, and activity-based costing; cost-volume-profit and relevant cost analysis; profit planning; capital budgeting. *Prerequisites: ACCT 2251.*

ACCT 2701 - Legal Environment of Business

Units: 4

Legal and institutional setting in which business operates; the nature, sources, functions, and processes of law and legal reasoning relating to contracts, agency, torts, partnerships, and corporations; government regulations and administrative law as they apply to the legal environment. Formerly MGMT 2701.

ACCT 3170 - Accounting Information Systems I

Units: 4

The roles and responsibilities of business information systems within the IT function. Concepts covered: hardware, software, operating systems, database management systems, systems operation, disaster recovery, business continuity, electronic commerce and information systems controls. *Prerequisites: Satisfying PC proficiency.*

ACCT 3210 - Cash Management

Units: 4

Principles of cash management in a corporate finance setting. Focus on how financial accounting, the collection cycle, electronic commerce, information technology, investment strategies, debt, and international business affect cash management. Yield curve analysis. *Prerequisites: ACCT 2251 and FIN 3300.*

ACCT 3211 - Intermediate Financial Accounting I

Units: 4

First course in the intermediate financial accounting sequence. Topics include: conceptual framework for financial reporting and standard setting, accounting process, financial statements, and accounting for revenue recognition, cash, receivables and inventories. *Prerequisites: ACCT 2251 or equivalent, with "C-" grade or better.*

ACCT 3212 - Intermediate Financial Accounting II

Units: 4

Second course in the intermediate financial accounting sequence. Topics include: time value of money, operational assets, current liabilities and contingencies, bonds and long-term notes, investments, derivatives and leases. *Prerequisites: ACCT 3211 or equivalent, with "C-" grade or better.*

ACCT 3213 - Intermediate Financial Accounting III

Units: 4

Third course in the intermediate financial accounting sequence. Topics include: income taxes, pension, shareholders' equity, employee compensation, earnings per share, accounting changes and error corrections, and statement of cash flows. *Prerequisites: ACCT 3212 or equivalent, with "C-" grade or better.*

ACCT 3220 - Tax Accounting: Fundamentals and Individuals

Units: 4

Subject matter focuses on tax fundamentals such as gross income, losses, property transactions, tax accounting and individual taxation. Skills developed include tax research, analysis and technical writing in the context of the course subject matter.

ACCT 3228 - Volunteer Income Tax Assistance (VITA): Income Tax Return Preparation

Units: 4

Classroom training in the preparation of federal and state income tax returns. Students are assigned individual state and federal tax returns to prepare and file for clients from the community. *Prerequisites: Permission of instructor.* May be repeated once for credit.

ACCT 3230 - Cost Management

Units: 4

Fundamental concepts of cost accounting, new developments in cost management, and costing information for managerial decisions. Topics include various costing systems, activity-based costing, cost allocation, pricing decisions, transfer pricing, and performance measurements. *Prerequisites: ACCT 2253 and MGMT 3100 or ECON 4000.*

ACCT 3280 - Accounting for Governmental and Nonprofit Entities

Units: 4

Accounting standards for governmental and nonprofit entities. Emphasizes special characteristics of governmental accounting: modified accrual basis, fund-based accounting, budget-based reporting, and government reporting model. Unique issues for private-sector nonprofit organizations, particularly health care providers or colleges and universities. *Prerequisites: ACCT 3211.*

ACCT 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least 2.0 GPA; departmental approval of activity.* May be repeated for credit, for a maximum of 4 units. Units not applicable to options or minor. *CR/NC grading only.*

ACCT 3999 - Issues in Accounting

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in accounting. May be repeated for credit when content varies, for a maximum of 8 units.

ACCT 4170 - Accounting Information Systems II

Units: 4

Topics include concepts of REA data modeling in the design of an accounting information system, advanced Access queries for financial and managerial decision-making, introduction to the Oracle database for financial reporting, fundamentals of global financial reporting language XBRL. *Prerequisites: ACCT 3170. A-F grading only.*

ACCT 4211 - Advanced Financial Accounting

Units: 4

Emphasis on business combinations. Other topics include partnership accounting, interim and segment reporting, foreign currency transactions, accounting for derivatives and hedging foreign exchange risk, and translation of foreign subsidiaries' financial statements. *Prerequisites: ACCT 3212 with a grade not lower than "C-".*

ACCT 4220 - Tax Accounting: Corporate Tax

Units: 4

Corporate taxation from inception to dissolution. Also includes consolidated returns, multinational issues, multistate issues, S Corporations, and tax exempt corporations. Skills developed include tax research, analysis and technical writing in the context of the course subject matter.

ACCT 4221 - Tax Accounting: Partnerships, Gifts, Estates, Trusts

Units: 4

The taxation of partnerships and partners, gift tax, estate tax, and income taxation of trusts and estates. Skills developed include tax research, analysis and technical writing in the context of the course subject matter. *Prerequisites: ACCT 3220 or ACCT 4220.*

ACCT 4223 - Business Law for Accountants

Units: 4

Business law topics of the CPA exam including contract law, commercial law (UCC), compliance with government regulations, negotiable instruments, secured transactions, bankruptcy, agency, employment and labor law, antitrust law, federal securities laws, business entities, and property.

ACCT 4227 - Volunteer Income Tax Assistance (VITA): Supervisory IV

Units: 4

Coordinating the operations of two or more VITA centers to achieve optimum combination of output and quality control and providing assistance to center supervisors in answering technical taxation questions, directing VITA preparers, and solving other center problems. *Prerequisites: ACCT 3220 and consent of instructor.* May be repeated once for credit, for a maximum of 8 units. Not more than 12 units of VITA coursework can be counted toward undergraduate degree requirements.

ACCT 4250 - Auditing I

Units: 4

Topics include: nature and scope of engagement, audit planning, internal control in both manual and computerized environment, audit evidences, reports on audited financial statements and internal control, current announcements of the PCAOB, and the latest SAS. *Prerequisites: ACCT 3212.*

ACCT 4251 - Auditing II

Units: 4

Evaluation of information obtained to reach engagement conclusions. Reports required by GAS. Reports on: reviews and compiled financial statements, compliance with laws and regulations, agreed upon procedures, and the processing of transactions by service organizations. *Prerequisites: ACCT 4250. A-F grading only.*

ACCT 4252 - Information Technology Audit

Units: 4

Topics include: Understanding IT risks; the COBIT framework; audits of computerized information systems, proper system access and segregation of duties; the computer facility, the process of developing and implementing information systems, review of audit software. *Prerequisites: ACCT 3170 and ACCT 4250. A-F grading only.*

ACCT 4253 - Internal Auditing

Units: 4

Introduction to internal audit profession and process. Topics include the definition of internal auditing, IIA International Professional Practices Framework, risk, governance, control issues, conducting internal audit engagements, auditing standards, working papers, audit procedures and evidence gathering, sampling, and flow charting. *Prerequisites: ACCT 3211 with a grade "C" or better. A-F grading only.*

ACCT 4370 - International Accounting

Units: 4

A study of transnational financial reporting and disclosure issues, including foreign currency translation and changing prices, comparative financial statement analysis, and the introduction of international accounting and auditing standards. *Prerequisites: ACCT 3212.*

ACCT 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

ACCT 4911 - Accounting Ethics

Units: 4

Ethical issues and responsibilities of accountants through discussion of ethical reasoning techniques, professional guidance by AICPA, SEC, and Sarbanes Oxley Act, and financial statement fraud cases. *Prerequisites: ACCT 2251.*

Accounting: Graduate

Graduate Courses

Restricted to "Classified" and "Conditionally Classified" Graduate Students.

Course prerequisites are enforced but may be waived per approval of the director of Graduate Programs.

ACCT 6015 - Financial Accounting

Units: 4

Focus on financial reporting, analysis, interpretation, and decision-making for managers. Topics include constructing, analyzing and interpreting financial statements; analyzing transactions, reporting and analyzing operating income, operating assets, debt financing, owner financing, and off-balance-sheet financing. Strongly Recommended: ***See Errata chapter in this catalog concerning prerequisite update.** *A-F grading only.*

ACCT 6202 - Corporate Tax

Units: 4

Corporate taxation from inception to dissolution. Also includes consolidated returns, multinational issues, multistate issues, S Corporations, and tax exempt corporations. Skills developed include tax research, analysis and technical writing in the context of the course subject matter. Undergraduate, upper division course plus a graduate tutorial module. Students in the MBA (Taxation Option) have registration priority. Not open to those with credit for ACCT 4220.

ACCT 6215 - Managerial Accounting

Units: 4

Focus on analyzing accounting information critical for managerial decision-making. Topics include cost estimation, cost-volume-profit analysis, product costing, activity-based costing and management, operational budgeting, capital budgeting decisions, pricing and target costing, performance evaluation, segment reporting, and balanced scorecard. Strongly Recommended: ***See Errata chapter in this catalog concerning prerequisite update.** *A-F grading only.*

ACCT 6222 - Income Taxation of Partners and Partnerships

Units: 4

Concepts and principles governing the taxation of partners and partnerships; including the tax effect of formation, partnership agreements, distributions, and dissolutions.

ACCT 6223 - Federal Tax Research, Procedures, and Penalties

Units: 4

Methods of researching federal tax issues using LEXIS and other research materials with a focus on case studies. Emphasis on administrative procedures, introduction to the judicial process, and taxpayer and preparer penalties.

ACCT 6224 - Advanced Corporate Taxation

Units: 4

Corporate liquidations, redemptions, reorganizations, carryovers of tax attributes, personal holding companies, accumulated earnings tax, collapsible corporations, consolidated returns, and employee compensation plans.

ACCT 6226 - State and Local Taxation

Units: 4

A study of principles and concepts of state and local taxation. Includes income tax, property tax and sales/use tax. Selected State

of California tax issues are discussed as well as multistate tax issues. Considers individuals, partnerships, corporations, and other entities.

ACCT 6227 - S Corporations and Other Flow-Through Entities

Units: 4

Concepts and principles governing the taxation of S corporations and S shareholders; including the tax effect of formation, operations, distributions, and liquidations. Selected advanced partnership issues.

ACCT 6229 - Estate/Gift Tax and Income Taxation of Estates and Trusts

Units: 4

Taxation of beneficiary, estate, gift, and related tax treatment of fiduciary entity. Focus on estate tax planning.

ACCT 6258 - Tax Planning for Individuals

Units: 4

Individual tax planning, minimizing taxes. Comprehensive personal financial planning: retirement income planning, estate planning, short-term investment planning. Tax consequences of property transactions and different arrangements, such as family trusts, wills, private annuities.

ACCT 6410 - Tax Accounting Periods and Methods

Units: 4

Cash and accrual methods, startup and organization costs, installment sales, accounting periods and the appropriate tax year-end, inventory methods including the uniform capitalization rules, original issue discount, bad debt reserves, and FASB 109.

ACCT 6420 - Fundamentals of Federal Income Taxation

Units: 4

Federal income taxation concepts applicable to individuals, corporations, partnerships. Gross income, deductions, credits, property transactions, tax accounting methods. Rules governing formation, operation, disposition of partnerships/corporations. Not open to students in M.B.A. option in Taxation.

ACCT 6470 - International Tax: Inbound

Units: 4

Primarily involves the study of taxation of Inbound International Business. Examines jurisdiction to tax citizens, residency issues, sources of income and deductions, U.S. taxation of foreign persons, and methods of transfer pricing.

ACCT 6472 - International Tax: Outbound

Units: 4

Primarily involves a study of taxation of outbound international business. Examines the U.S. tax effects of foreign branches and foreign entities, foreign tax credit limitations, international sales of goods, and transfer of rights and intangibles.

ACCT 6510 - Accounting Theory

Units: 4

Critical study of alternative accounting theories and their implications for accounting standard setting. Topics include information and decision theory, role of accounting in capital markets, information content of earnings, clean surplus theory, positive accounting theory, executive compensation, and earnings management. *A-F grading only.*

ACCT 6520 - Strategic Cost and Performance Management

Units: 4

Design of cost and performance management systems for strategic managerial decision-making and for implementing strategy. Topics include activity-based costing systems, activity-based management, profit planning, evaluating profit performance, transfer pricing, balanced scorecard, and incentive and compensation systems. *A-F grading only.*

ACCT 6540 - Financial Reporting for Special Industries

Units: 4

In-depth study of financial reporting standards and accounting issues for banking and financial institutions and other topics for special industries including real estate, environmental and oil and gas accounting, accounting for high-tech firms and wine industries. *A-F grading only.*

ACCT 6541 - Healthcare Accounting

Units: 4

In-depth study of financial reporting standards and accounting and cost management issues for healthcare organizations such as hospitals, medical centers, nursing homes, and health insurance companies. *A-F grading only.*

ACCT 6542 - Financial Reporting for Banks and Financial Institutions

Units: 4

An in-depth study of accounting and financial reporting for banks and financial institutions. Topics include regulations and regulatory capital matters for banks and financial institutions, bank's financial statements, evaluating the performance of banks, and accounting and financial reporting for banks. *A-F grading only.*

ACCT 6550 - Advanced Accounting Information Systems

Units: 4

In-depth study of accounting and financial reporting for banks and financial institutions. Topics include regulations and regulatory capital matters for banks and financial institutions, bank's financial statements, evaluating the performance of banks, and accounting and financial reporting for banks. *A-F grading only.*

ACCT 6560 - Financial Statement Analysis and Business Valuation

Units: 4

Analysis and forecast of financial statements for business valuation and financial strategies. Topics include financial statement analysis and forecast, business valuation using accounting and cash flow based models, valuation analysis for equity security, credit decisions, and mergers and acquisitions. *A-F grading only.*

ACCT 6570 - Financial Reporting Systems: Oracle Financial Applications I

Units: 4

Design and implementation of financial reporting systems using Oracle Financial Applications. Topics include system design and

implementation for a company from financial reporting analysis, chart of accounts design, transaction processing to reports generation using Oracle General Ledger and Receivables systems.

ACCT 6571 - Financial Reporting Systems: Oracle Financial Applications II

Units: 4

Design and implementation of financial reporting systems using Oracle Financial Applications. Topics include system design for a company from payable and asset system setup, payables and assets transaction processing to reports generation using Oracle Payables and Fixed Assets systems. *A-F grading only.*

ACCT 6580 - International Financial Reporting and Standards

Units: 4

Focus on international financial reporting standards and their applications, and the discussion of environmental dimensions influencing accounting development, comparative financial statement analysis across countries, and other accounting issues associated with multinational corporations. *A-F grading only.*

ACCT 6590 - Attestation and Information Systems Audit

Units: 4

Topics include: current announcements of the PCAOB and the latest SAS, functions of internal audit under the Sarbanes-Oxley Act, application of the Enterprise Risk Management-Integrated Framework, information-technology audit using ACL and IDEA, and concepts of XBRL audit. *A-F grading only.*

ACCT 6600 - Mergers and Acquisitions

Units: 4

Topics include: M&A process, legal and regulatory framework, accounting for M&As, taxation and acquisitions, strategic processes, theories of merger, empirical tests of M&A performance, valuation, alliances and joint ventures, international takeovers and restructuring, and strategies for creating value. *A-F grading only.*

ACCT 6611 - Financial Reporting and IFRS I

Units: 4

First course in the sequence of financial reporting and IFRS. Topics include U.S. Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS) on conceptual framework for financial reporting, the accounting process, financial statements, revenue recognition, cash, receivables, and inventories. *A-F grading only.*

ACCT 6612 - Financial Reporting and IFRS II

Units: 4

Second course in the sequence of financial reporting and IFRS. Topics include U.S. Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS) on property; plant; and equipment, intangible assets, current liabilities and contingencies, long-term liabilities, and leases. *A-F grading only.*

ACCT 6613 - Financial Reporting and IFRS III

Units: 4

Third course in the sequence of financial reporting and IFRS. Topics include U.S. Generally Accepted Accounting Principles

(GAAP) and International Financial Reporting Standards (IFRS) on investments, income taxes, pensions, stockholders' equity, earnings per share, accounting changes, and statement of cash flows. *A-F grading only.*

ACCT 6620 - Advanced Topics in Financial Accounting

Units: 4

Detailed accounting for business combinations in the first and subsequent years, including consolidations of 100% and less than 100% ownership and intercompany transactions. Accounting for partnerships including formation, profit and loss sharing, and dissolution. *A-F grading only.*

ACCT 6630 - Governmental and Not-for-profit Accounting

Units: 4

Elaborate financial reporting model based on GASB No 34. Focus on distinct characteristics of governmental accounting: modified accrual basis, budgetary accounting, usage of funds. Discuss unique accounting issues for all not-for-profit entities and health care organizations. *A-F grading only.*

ACCT 6640 - Auditing Theory and Practice I

Units: 4

Foundation of auditing process from the perspective of historical financial statements audit. Topics include: test of controls, substantive testing, and compliance with Sarbanes Oxley Act 2002. Current professional standards of the AICPA and PCAOB are addressed. *A-F grading only.*

ACCT 6650 - Auditing Theory and Practice II

Units: 4

In-depth study of audit planning and communications in relation to different types of engagement. Topics include International Standards on Auditing (ISAs) and International Federation of Accountants (IFAC) Codes of Ethics for Professional Accountants. *A-F grading only.*

ACCT 6660 - Accountants' Ethics and Professional Responsibilities

Units: 4

Explores ethical, legal, regulatory issues and social responsibilities facing the accounting profession. Covers the elements of ethical reasoning, corporate governance, and reviews professional codes of conduct of the AICPA and other regulatory bodies and their real-world business application. *Prerequisites: ACCT 2251. A-F grading only.*

ACCT 6670 - Business Law and Regulations

Units: 4

Focuses on strategic, policy and risk management aspects of the legal rights and responsibilities of a business. Utilizes case studies, group projects and presentations to develop practical approaches to deal proactively with key stakeholders in legal and regulatory compliance matters. *A-F only.*

ACCT 6707 - Cross-Border Transfer Pricing

Units: 4

Transfer pricing methods used for transfers of tangible and intangible property, services and financial products between U.S. corporations and their international affiliates. Advanced Pricing agreements between the U.S. and foreign tax authorities.

ACCT 6898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities within the quarter enrolled. *CR/NC grading only.*

ACCT 6899 - Project

Units: 1

A comprehensive capstone project that extends student projects completed for ACCT 6560 Financial Statement Analysis and Business Valuation course. *A-F grading only.*

ACCT 6900 - Independent Study

Units: 1-4

ACCT 6909 - Departmental Thesis

Units: 1-4

Development and writing of a research paper for submission to the department which specifies its format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. Should be taken concurrently with ACCT 6223 by students using ACCT 6909 for their terminal exercise.

ACCT 6999 - Issues in Accounting

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in accounting.

Anthropology

ANTH 1000 - Introduction to Anthropology

Units: 4

The holistic study of human beings for non-majors: concepts of human evolution, prehistory, culture; comparison in human variation; structure and function in social organization; synthesis of biological, cultural, and social factors. Four hrs. lect., or 3 hrs. lect., 1 hr. disc.

ANTH 1010 - The Human Adaptation

Units: 4

Introduction to the study of humans in the natural world, human origins, and adaptations both from a cultural and biological perspective.

ANTH 1100 - Introduction to Biological Anthropology

Units: 4

An introduction to human biology from an evolutionary perspective. Topics include evolutionary theory, evolution of the primates based on fossil remains, behavioral studies of living primates, and modern human variability and adaptations. Four hrs. lect.; or three hrs. lect., 1 hr. disc.

ANTH 1200 - Introduction to Archaeology

Units: 4

Introduction to the techniques used in recovery and interpretation of archaeological materials. Examples of the processes of cultural reconstructions from sites in the old and new world.

ANTH 1300 - Introduction to Cultural Anthropology

Units: 4

Functional approaches to the structure and dynamics of culture and society around the world; comparative study of human behavior and value systems in varied ecological settings.

ANTH 2801 - Language and Thought: Anthropological Perspectives

Units: 4

Does language influence culture? Can different languages lead their speakers to different ways of thinking? Examination of the relationship of language and thought using examples from languages around the world. Discussion of classic and contemporary works.

ANTH 3000 - Anthropology in the Modern World

Units: 4

The relevance of anthropology to contemporary world problems and issues of mankind. A course for non-majors examining topics such as the social and cultural dimensions of health services, population problems, business, management, and public administration.

ANTH 3999 - Issues in Anthropology

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in anthropology. May be repeated once for credit when content varies, for a maximum of 8 units.

Anthropology: Applied

ANTH 3710 - Anthropology and Museums

Units: 4

The anthropologist in the museum profession; the curatorial role; acquisition, identification, recording, repair, preservation and display of anthropological materials. Minimum of two field trips required. *Prerequisites:* ANTH 1100, ANTH 1200, or ANTH 1300, or *consent of instructor*. May be repeated once for credit, for a maximum of 8 units. One hr. lect., 6 hrs. act.

ANTH 3720 - Medical Anthropology

Units: 4

The ecology of health, magical beliefs, and medicine; public health and medical problems as affected by cultural differences; the effects of acculturation upon mental and physical health. *Prerequisites:* Junior or senior standing or *consent of instructor*.

ANTH 3745 - Human Sexuality: Anthropological Perspectives

Units: 4

A cross-cultural and evolutionary study of human sexuality expanding the constricted perspectives of Western cultures, including a review of sexual practices and attitudes, gender roles in sensuality, and sexual orientation in both Western and non-Western societies.

ANTH 3750 - Women in Cross-Cultural Perspective

Units: 4

Similarities and differences in women's experiences in various societies around the world. Questions concerning gender identity, sexuality, marriage, the family, work, power, and intersections of gender with age, class and other inequalities.

ANTH 3760 - Media in Cross-Cultural Perspective

Units: 4

Introduction to socio-cultural anthropology from the perspective of visual media; ethnographic and feature films, video, and slides of field work. Assigned readings and lectures parallel media presentations placing them in a broader topical and theoretical context.

ANTH 3765 - Business Anthropology

Units: 4

Study of culture, institutions, and globalization through a focus on the anthropology of doing business. Application of anthropological insights to commercial encounters using case studies and direct experience. Topics include cross-cultural negotiation, organizational culture, and economic anthropology.

ANTH 3785 - Anthropology in Action

Units: 4

Application of anthropological theory and methods to selected contemporary problems, including public health issues and policy, education, women and children, community development. Service learning activity at a local community organization.

Prerequisites: Upper division standing or consent of instructor.

ANTH 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least a 2.0 GPA; departmental approval of activity. Only up to 4 units may be applied to the Anthropology major. Not for credit in the Anthropology minor.* May be repeated for credit, for a maximum of 8 units. *CR/NC grading only.*

Anthropology: Archaeology

ANTH 3200 - Science in Archaeology

Units: 4

Introduction to the application of the physical sciences in the solutions of problems in prehistory. Emphasis on dating methods and paleoenvironmental reconstructions. *Prerequisites: ANTH 1200 or consent of instructor.*

ANTH 3250 - Precolumbian America: Aztec, Inca, Maya

Units: 4

The origins, growth and interaction of the Mesoamerican and South American civilizations, with particular emphasis on the Aztecs, Incas and Mayas. Archaeological, historical and ethnographic evidence.

Anthropology: Biological

ANTH 3100 - Human Evolution I

Units: 4

Human and non-human primate evolutionary history. Fossil evidence, comparative anatomy and molecular systematics; Primate evolutionary history based on fossil evidence and comparative anatomy (F)

ANTH 3101 - Human Evolution II

Units: 4

Human and non-human primate evolutionary history. Fossil evidence, comparative anatomy and molecular systematics; The fossil evidence for human evolution. One course is not prerequisite to the other. *Prerequisites:* ANTH 1100 or BIOL 3020 or equivalent, or consent of instructor.

ANTH 3110 - Primate Social Behavior

Units: 4

A survey course concerned with behavior of non-human primates. Discussions of the relationships between social structure and the environment. The relevance of the study of non-human primate behavior to an understanding of human behavior will be emphasized.

Anthropology: Biological Archaeology

ANTH 4240 - Data Analysis in Archaeology

Units: 4

General field and laboratory techniques for retrieval and analysis of data recovered from prehistoric and/or historic sites.

Prerequisites: ANTH 1200 or consent of instructor. May be repeated once for credit, for a maximum of 8 units. One hr. lect., 6 hrs. act.

ANTH 4250 - Field Course in Archaeology

Units: 5

Techniques of surface survey and scientific excavation; controlled data retrieval from a variety of archaeological field situations. Aspects emphasized will depend on available opportunities. *Prerequisites:* ANTH 1200 or ANTH 3200 or consent of instructor. One hr. lect., 8 hrs. act.

ANTH 4260 - Human Osteology Laboratory

Units: 3

A laboratory course on the human skeleton. Reconstruction of individual characteristics based on metric, non-metric and statistical analysis. Topics may include analysis of human populations from archaeological contexts, paleodemography, and paleopathology. *Prerequisites:* ANTH 1100 or consent of instructor. 6 hrs. lab.

ANTH 4280 - Forensic Osteology

Units: 4

Identification and interpretation of human skeletal remains. Includes significant anatomy content designed to build skills in identifying bone fragments. Analysis of identity, trauma, pathology, and bone modification emphasized, especially as relevant to reconstructing events in life and immediately surrounding death. *Prerequisites:* ANTH 1100, BIOL 2010, BIOL 2011, BIOL 2020 or consent of instructor. *Co-requisites:* ANTH 4260 recommended. Three hrs. lect., 2 hrs. act.

Anthropology: Graduate

ANTH 6100 - Seminar in Biological Anthropology

Units: 4

Critical examination of theoretical developments in paleoanthropology and primatology, with emphasis on evolutionary mechanisms. *Prerequisites:* Graduate standing and permission of instructor.

ANTH 6200 - Seminar in Archaeology/Prehistory

Units: 4

Advanced study of methods and theories used in archaeological research, combining discussion of current archaeological literature and individual analysis of available archaeological data. *Prerequisites:* Graduate standing and permission of instructor.

ANTH 6251 - Advanced Archaeological Field Methods

Units: 5

Advanced techniques in surface survey and archaeological excavation, laboratory artifact analysis, and principles of data recording and management. Aspects emphasized will depend on opportunities available. May be repeated once for credit, for a maximum of 10 units.

ANTH 6260 - Graduate Osteology

Units: 1

Identification and interpretation of human skeletal remains. Provides basic study outline and practical examinations for graduate students. Complements ANTH 4280 and ANTH 4260. Recommended Co-requisite: ANTH 4260. *A-F grading only.*

ANTH 6350 - Advanced Ethnographic Methods

Units: 5

Ethnographic research design; wide range of observation and interview methods, introduction to quantitative description, field notes, research ethics, methods of analysis and representation, relevant software programs, oral and written presentation of original field research.

ANTH 6400 - Seminar in Socio-Cultural Anthropology

Units: 4

A critical examination of traditional and contemporary theories and methods in socio-cultural anthropology, including trends in the various subfields of the discipline. Emphasis on student participation in criticism and synthesis of significant theoretical positions.

ANTH 6700 - Applied Anthropology

Units: 4

Anthropological principles and methods applied to problems of sociocultural change and cross-cultural communication; community based participatory methods and planning; policy analysis; organizational culture, needs assessment, program evaluation, proposal development.

ANTH 6760 - Internship Experience

Units: 4

Applied M.A. track internship in an agency or nongovernmental organization, including personal activity log, mid-internship report, internship completion statement, and oral presentation on internship.

ANTH 6770 - Internship Planning and Analysis

Units: 4

Training in developing, presenting, and evaluating position papers, proposals, work plans; literature searches; ethics and professional development for work outside academia; active involvement in securing appropriate internship and analyzing the internship experience and data.

ANTH 6800 - Seminar in Linguistic Anthropology

Units: 4

Seminal work within the subdisciplines of anthropological linguistics, including examples of its application.

ANTH 6898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *CR/NC grading only.*

ANTH 6900 - Independent Study

Units: 1-4

Independent study in anthropology with concentration on a specific problem under guidance by a faculty sponsor.

ANTH 6905 - Directed Readings in Anthropology

Units: 1-5

Selected readings in consultation with two or more appropriate faculty members in preparation for the Master's Comprehensive Written Examination in two sub-fields of anthropology. The reading list and the exams must be consistent with the student's areas of concentration and approved by the Graduate Advisor.

ANTH 6909 - Departmental Thesis

Units: 1-4

Development and writing of a research paper for submission to the department which specifies its format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required.

ANTH 6910 - University Thesis

Units: 1-5

Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least two of whom must be members of the Department. Oral defense normally required. (See "University Thesis Writing Guide," www.csueastbay.edu/thesiswritingguide.)

ANTH 6999 - Issues in Anthropology

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in anthropology.

Anthropology: Regional and Ethnographic

ANTH 3500 - North American Indians

Units: 4

Native peoples and cultures of present-day United States and Canada.

ANTH 3505 - Indians of California

Units: 4

Habitat, economy, society, arts, and beliefs of the native populations of California.

ANTH 3510 - South American

Units: 4

Peoples and cultures of South America from contact times to the present. Ecological adaptations, socioeconomic organization, kinship, religion, and culture change.

ANTH 3545 - China

Units: 4

Cultural patterns, religion, social structure, ecological setting and regional variations of China, Taiwan and Hong Kong; their traditional, present and future role in the world.

ANTH 3550 - Japan

Units: 4

Cultural patterns, religion, social structure and ecological settings of Japan. Topics will include family and kinship, gender roles, work groups, socialization, and education.

ANTH 3555 - Cultures of East Asia

Units: 4

Anthropological perspectives on East Asia, including China, Japan, and Korea. Cultural sharing (e.g., Confucianism, Buddhism) and cultural differences, with focus on religion, social structure, ecology, and contemporary issues.

ANTH 3580 - Middle East

Units: 4

An exploration of the regional diversity of people and social institutions of the Middle East in order to understand the complexities of current social issues.

Anthropology: Sociocultural

ANTH 3400 - Social Anthropology

Units: 4

Structural-functional approach to the comparative study of human institutions, with emphasis on changing kinship, family, and social structure in various regions of the world. Critical analysis of major ethnographic works and substantial writing required.

Prerequisites: ANTH 1300 or consent of instructor.

ANTH 3410 - Folklore

Units: 4

Introduction to and survey of oral literature, e.g., folktales, myths, legends, proverbs, riddles, etc., especially among non-literate peoples; methods and theories of folklore analysis and the use of folklore in studies of diffusion, social functions, world view, and religion.

ANTH 4310 - Field Course in Ethnography

Units: 5

Securing, recording, ordering, and analysis of cultural data; problems of participant observation and eliciting information from informants; methods of data collection. Field work all day Saturday or two afternoons per week. *Prerequisites: One course in ANTH 1300 or ANTH 3400 or ANTH 3500 series.* One hr. lect., 8 hrs. act.

ANTH 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

ANTH 4910 - Pro-Seminar in Anthropology

Units: 4

Seminar in history and philosophy of anthropological thought: its place among the sciences and the humanities, schools of thought and the respective contributions of eminent anthropologists. *Prerequisites: Senior standing, completion of three upper division anthropology courses or consent of instructor.*

Anthropology: Symbolic and Religious

ANTH 3800 - Language and Culture

Units: 4

The structured nature of language, linguistic classification, and the relationship of language, thought and reality viewed through the perspective of linguistic relativity.

ANTH 3801 - Language in the Modern World

Units: 4

Language in a global era viewed from a socio-historical perspective: the spread of a few major languages and increasing multilingualism; the extinction of many smaller languages; the rise of English as the first world language resulting in new varieties of English.

ANTH 3840 - Folk Religion and Magic

Units: 4

Cross-cultural comparison of the origins, development and social functions of magical, witchcraft and religious beliefs and behavior, including relevant aspects of symbolism, ritual, ceremony, spirit possession, exorcism, divination, pilgrimage, renunciation and revivalistic cult movements.

Art

ART 3999 - Issues in Art

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in art. May be repeated for credit when content varies, for a maximum of 48 units.

ART 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

Art: History

ART 1010 - Introduction to World Art History

Units: 4

An examination of style in the visual arts and factors which influence the nature of art in selected salient periods of art history. Not open to students with credit for ART 1011.

ART 1081 - History of Animation

Units: 4

Survey of historical developments, styles, techniques, theory and criticism of animation as an art form.

ART 1085 - History of Games

Units: 4

Survey of the history of games from playground to screen; examining games and organized play as culture and art form.

ART 3010 - Latin American Art

Units: 4

Art and architecture of Latin America from the conquest and colonial period to the present, including art of Mexico, Central America and South America. Field trips may be required.

ART 3035 - Modern Art

Units: 4

Main topics of European art of the Modern period from the nineteenth century to the middle of the twentieth century including Impressionism, Cubism, and Surrealism.

ART 3040 - Art in the United States

Units: 4

The development of art in the United States from the colonial period to the present. Individual visits to museums required.

ART 3085 - Theory of Games

Units: 4

In-depth examination of the theory and practice of games from the perspectives of narratology and ludology.

ART 3227 - Women in Art

Units: 4

Women artists and images of women's art, including history from ancient periods to the present. Individual museum and/or field trips may be required.

ART 3230 - Art and Philosophy of the East

Units: 4

(See PHIL 3230 for course description.)

ART 3400 - History of Art and Technology

Units: 4

How the interaction of art and technology shaped human culture from cave paintings to computers. Priority given to Art majors and minors.

ART 3411 - Advanced Survey of World Art

Units: 4

Survey of major theories of Western Art, Tribal Art, and Non-Western Art. Shamanism and Goddess worship and ending with postmodernism. Field trips may be required. Priority given to Art Majors and Minors.

ART 4005 - Histories of Film

Units: 4

A thematic approach to film that analyzes the subject's history, innovative visual strategies, content and cultural context. Themes may vary and may include world cinema, past visions of the future, Hollywood/Bollywood, existentialism, spiritual representations, war, etc. May be repeated once for credit with consent of instructor and when content varies, for a maximum of 8 units. Cross-listed COMM 4005.

ART 4020 - Shamanism and Art: A Cross-Cultural Perspective

Units: 4

The relationship between the practice of shamanism and art from around the world. Artworks from North American Indian, Oceanic, Siberian, Aboriginal, Huichol and African cultures as well as those from Indonesia, China and Tibet. The practice of shamanic techniques by modern artists.

ART 4060 - History of Graphic Design

Units: 4

The development and evolution of graphic design including its relationship to culture, influential artists, designers and studios. Field trips may be required. Priority given to Art majors and minors.

ART 4070 - Currents in New Media

Units: 4

Contemporary artistic developments in new media including artists, aesthetic trends, materials, and methods. Field trips may be required. Priority given to Art Majors and Minors.

ART 4071 - Contemporary Art

Units: 4

The most recent developments in art from WW II to the present with an emphasis on post-modernism. Individual study visits to museums and/or field trips required. (Y)

ART 4620 - History of Photography

Units: 4

(See COMM 4620 for course description.)

ART 4621 - History of Photography Since 1960

Units: 4

Survey of the cultural issues and aesthetic developments in photography since 1960, with emphasis on fine art photography. Field trips may be required.

ART 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

Art: Studio

ART 1020 - The Creative Process

Units: 4

Studio practice emphasizing creativity and imagination in the realization of works of visual art. Field trips may be required. Two hrs. lect., 4 hrs. act.

ART 1112 - Ceramics I

Units: 4

Introduction to the basic techniques of construction with clay, including basic throwing and glazing techniques. Field trips may be required. Two hrs. lect., 4 hrs. act.

ART 1113 - Drawing I

Units: 4

Introduces varied approaches to drawing and use of materials. Projects increase perceptual and imaginative abilities. Instruction in using line, shape, and illusion of form to translate/interpret what you see or how you respond. Field trips may be required. Two hrs. lect., 4 hrs. act.

ART 1114 - Painting I

Units: 4

Provides introductory experiences in making images and using painting materials. Slides, reproductions and demonstrations accompany lectures. Projects and discussions develop students' understanding of how painting can communicate our experience and imagination. Field trips may be required. Two hrs. lect., 4 hrs. act.

ART 1115 - Printmaking I

Units: 4

An introduction to a major graphic process (such as Intaglio, Monoprint/Monotype, or Relief printing), and its history. Field trips may be required. May be repeated for credit with consent of instructor and when content varies, for a maximum of 12 units. Two hrs. lect., 4 hrs. act.

ART 1116 - Introduction to Sculpture

Units: 4

An introduction to creating art in a 3-dimensional space, using a variety of materials for fabrication and casting. Field trips may be required. Two hrs. lect., 4 hrs. act.

ART 1121 - Introduction to Bookmaking

Units: 4

Introduction to creating art in book form and to the history of artists' books. Basic binding and printing techniques. Field trips may be required. Two hrs. lect., 4 hrs. act.

ART 2025 - Basics of New Media

Units: 4

Computer as a creative tool in design of digital imagery and artwork through bitmap and vector based software. *Prerequisites: Declared Art major/minor or department permission.* Two hrs. lect., 4 hrs. act.

ART 2146 - Storyboarding

Units: 4

Traditional and digital drawing techniques and concepts in storyboarding. *Prerequisites: ART 1113. Four hrs. act.*

ART 2630 - Digital Photography I

Units: 4

Using digital cameras to explore fundamental principles of image making, composition, color theory, color management, lighting, and image processing with Photoshop and ink jet printing. Students are required to provide their own digital camera. Two hrs. lect., 4 hrs. act.

ART 2701 - Black and White Photography I

Units: 4

Fundamental theory and practice of black and white photography with emphasis on darkroom printing and developing. 35 mm camera recommended. Cross-listed COMM 2701. Not open to students with credit for COMM/ART 2700. Two hrs. lect., 4 hrs. act.

ART 2702 - Black and White Photography II

Units: 4

Advanced black and white darkroom techniques, including split filter and fiber paper printing, toning, and solarization; use of black and white film with medium format cameras. *Prerequisites:* ART 2701/COMM 2701 or consent of instructor. May be repeated once for credit, for a maximum of 8 units. Two hr. lect., 4 hrs. act.

ART 2805 - Computers and Print

Units: 4

Printing as graphic impression - composition, inking, registration, paper surfaces; relation to contemporary digital graphic reproduction. Field trips may be required. Two hrs. lect., 4 hrs. act.

ART 2810 - Principles of Design

Units: 4

Foundations of graphic design - composition, color, image, type; uses in the communication of meaning. *Prerequisites:* ART 2025 and ART 2630. Two hrs. lect., 4 hrs. act.

ART 2830 - Web Design

Units: 4

Design principles, web standards, and interactive multimedia for visual content on the Web. *Prerequisites:* ART 2025 and ART 2630. Two hrs. lect., 4 hrs. act.

ART 2851 - Introduction to Game Design and Scripting

Units: 4

Introduction to scripting languages, problem solving, and design patterns. Foundational concepts for traditional and interactive game creation. *Prerequisites:* ART 2025 and ART 2630. Two hrs. lect., 4 hrs. act.

ART 3121 - Advanced Bookmaking

Units: 4

Advanced techniques, including printing and binding techniques, for creating art in book form. Production of at least one finished book. Field trips may be required. *Prerequisites:* ART 1121 or permission of the instructor. May be repeated two times for credit, for a maximum of 12 units. Two hrs. lect., 4 hrs. act.

ART 3141 - Drawing II

Units: 4

Concepts and techniques of drawing, including studies from life. Emphasis on individual expression in various drawing media. Field trips may be required. *Prerequisites:* ART 1113. May be repeated once for credit for a maximum of 8 units. Two hrs. lect., 4 hrs., act.

ART 3142 - Figure Drawing

Units: 4

Principles of figure drawing. Field trips may be required *Prerequisites:* ART 1113. May be repeated twice for credit with consent of instructor, for a maximum of 12 units. Two hrs. lect., 4 hrs. act.

ART 3144 - Drawing Lab

Units: 2

Concepts and techniques of drawing. Three dimensional form, time-based narratives, and hand-generated visualization of ideas for the development of graphic concepts. *Prerequisites:* ART 1113 and ART 2025. May be repeated for credit, for a maximum of 6 units. One hr. lect., 2 hrs. act.

ART 3145 - Illustration

Units: 4

Traditional and digital drawing techniques and concepts for multimedia, graphic design, and graphic novel applications. *Prerequisites:* ART 1113. May be repeated three times for credit, for a maximum of 16 units. Four hrs. act. 3212

ART 3212 - Painting II

Units: 4

Emphasis on individual expression and critical analysis. Field trips may be required. *Prerequisites:* ART 1114. May be repeated once for credit with consent of instructor, for a maximum of 8 units. Two hrs. lect., 4 hrs. act.

ART 3213 - Painting III

Units: 4

Advanced study in painting. Individual project with selected media. Field trips may be required. *Prerequisites:* ART 3212. May be repeated for credit with consent of instructor and when content varies, for a maximum of 48 units. Two hrs. lect., 4 hrs. act.

ART 3215 - Figure Painting

Units: 2

Principles of figure painting, including use of two dimensional mixed media. Individual project with selected media. Field trips may be required. *Prerequisites:* ART 1113, ART 1114. May be repeated two times for credit with consent of instructor, for a maximum of 6 units. One hr. lect., 2 hrs. act.

ART 3316 - Advanced Sculpture

Units: 4

Developing and building on previously acquired skills in order to achieve mastery of the materials. Planning, designing, and

creating sophisticated and complex sculptural work that address significant issues in the artistic arena. May be repeated six times for credit with consent of instructor and when content varies, for a maximum of 28 units. Two hrs. lect., 4 hrs. act.

ART 3317 - Workshop in Spatial Arts

Units: 4

Focus on a particular medium, e.g. bronze, clay, steel, stone, mixed media, etc. May be repeated for credit when content varies, for a maximum of 48 units. Two hrs. lect., 4 hrs. act.

ART 3330 - Electronics for Sculpture

Units: 4

Learning the fundamentals of light and sound as art forms in 3-dimensional space using electricity, analog and digital electronics, electro-luminescent media, and sound synthesis. Two hrs. lect., 4 hrs. act.

ART 3340 - Mixed Media Assemblage

Units: 4

Integrating found objects and media into artworks in 3-dimensional space. Advanced mold-making and experimental materials. Discussion of reproduction and simulation in contemporary art. Two hrs. lect., 4 hrs. act.

ART 3420 - Selected Topics in Studio Art

Units: 2

Intensive study of a particular art practice, its concepts and techniques. *Prerequisites: Declared Art major/minor or consent of instructor.* May be repeated for credit when content varies, for a maximum of 24 units. One hr. lect., 2 hrs. act.

ART 3430 - Junior/Senior Seminar

Units: 2

Develops students' personal sense of aesthetics through selected reading, writing and discussion. In-depth critiques of student artwork. *Prerequisites: Declared Art major/minor.* May be repeated two times for credit with consent of instructor, for a maximum of 6 units.

ART 3440 - Visual Literacy

Units: 2

Slide lectures, writing, and discussion for the purpose of understanding the tools of visual communication and responding clearly in oral and written formats. May be repeated three times for credit, when content differs, for a maximum of 8 units.

ART 3512 - Ceramics II

Units: 4

Concentration on the techniques of throwing, glazing, kiln work, and related topics. Field trips may be required. *Prerequisites: ART 1112.* May be repeated two times for credit with consent of instructor, for a maximum of 12 units. Two hrs. lect., 4 hrs. act.

ART 3513 - Ceramics III

Units: 4

Emphasis on personal direction in ceramics. Field trips may be required. *Prerequisites:* ART 3512. May be repeated for credit with consent of instructor and when content varies, for a maximum of 48 units. Two hrs. lect., 4 hrs. act. (Y)

ART 3600 - Digital Photography II

Units: 4

Advanced digital camera, digital darkroom and ink jet printing techniques. Photography as a visual language and the aesthetics of photographic images. *Prerequisites:* ART 2630 or consent of instructor. Cross-listed COMM 3600. Two hrs. lect., 4 hrs. act.

ART 3620 - Alternative Processes in Photography

Units: 4

Experimental and alternative photographic methods, including cyanotype, platinum-palladium, bromoil, gum bichromate, and other historical processes. *Prerequisites:* ART 2630 or consent of instructor. May be repeated once for credit, for a maximum of 8 units. Two hrs. lect., 4 hrs. act.

ART 3630 - Digital Photography III

Units: 4

Advanced digital imaging techniques and the use of photography as a fine art and visual language. Field trips may be required. *Prerequisites:* ART 3600/COMM 3600 or consent of instructor. Cross-listed COMM 3630. Two hrs. lect., 4 hrs. act.

ART 3640 - Special Topic in Photography

Units: 4

Intensive study of a particular photography practice with fine art or commercial applications. *Prerequisites:* ART 2630 or consent of instructor. May be repeated once for credit when content varies, for a maximum of 8 units. Two hrs. lect., 4 hrs. act.

ART 3654 - Landscape Photography

Units: 4

Introduction to landscape photography and its techniques using digital, 35mm, and large format cameras. Field trips may be required. *Prerequisites:* ART 2630 or ART 2701/COMM 2701 or consent of instructor. Two hr. lect., 4 hrs. act.

ART 3655 - Advanced Landscape Photography

Units: 4

Advanced practice in landscape photography through photographic field trips. *Prerequisites:* ART 3654. May be repeated two times for credit, for a maximum of 12 units. Two hrs. lect., 4 hrs. act.

ART 3660 - Portrait Photography

Units: 4

A studio workshop approach to portrait photography. Various types of lighting such as flood, electronic flash, and natural. History of portraiture and contemporary vision. Field trips may be required. *Prerequisites:* ART 2630. Cross-listed COMM 3660. Two hrs. lect., 4 hrs. act.

ART 3661 - Advanced Portrait Photography

Units: 4

Advanced portrait and studio techniques for commercial and fine art applications; portfolio development. *Prerequisites:* ART 3660/COMM 3660 or consent of instructor. Two hrs. lect., 4 hrs. act.

ART 3670 - Introduction to Studio Lighting

Units: 4

Introduction to studio lighting using quartz and other hot light sources. Use of digital cameras and view cameras in the creation of commercial-quality product photography for print and the web. Field trips may be required. *Prerequisites:* ART 2630. Cross-listed COMM 3670. Two hrs. lect., 4 hrs. act.

ART 3671 - Advanced Studio Lighting

Units: 4

The use of electronic strobe lights in a studio lighting situation to create commercial product and portrait photography. Use of view camera and medium format camera will be emphasized. *Prerequisites:* ART 3670. May be repeated for credit when content varies, for a maximum of 48 units. Cross-listed COMM 3671. Two hours lect., 4 hrs. act.

ART 3680 - Photography Career Preparation

Units: 2

Fine art and professional photography career preparation. Topics include resume creation, gallery and museum interactions, commercial photography practices and apprenticeship programs, and general business practices for photographers. May require field trips. Cross-listed COMM 3680.

ART 3800 - Animation

Units: 4

Imaginative, computer-based animation, theories of movement and methods of storytelling for time-based narratives. *Prerequisites:* ART 3400, ART 3830, and ART 3870. Two hrs. lect., 4 hrs. act.

ART 3810 - Graphic Design I

Units: 4

Development of techniques that reflect real world needs for communicating graphical messages. *Prerequisites:* ART 2805, ART 3400, ART 3830, and ART 3870. Two hrs. lect., 4 hrs. act.

ART 3815 - Typography

Units: 4

Fundamentals and history of letterforms in art and design. Field trips may be required. *Prerequisites:* ART 2805, ART 3400, ART 3830, and ART 3870. Two hrs lect., 4 hrs. act.

ART 3820 - Digital Video

Units: 4

Video and audio for multimedia production. Projects using storyboards, cameras, lighting, audio technology, video digitizing, editing software. *Prerequisites:* ART 3400, ART 3830, and ART 3870. Two hrs. lect., 4 hrs. act.

ART 3825 - Motion Graphics

Units: 4

Using motion and timing to create graphic and typographic animation for video, interactive media and Web distribution.

Prerequisites: ART 3820 and ART 3800. Two hrs. lect., 4 hrs. act.

ART 3828 - Advanced Digital Video

Units: 4

Advanced topics in digital video production for multimedia. Video technology including formats, compression, and specifications. Motion graphics and integrating animation from non-video sources, optimizing video for the distribution channel, and interactive video. *Prerequisites:* ART 3825. Two hrs. lect., 4 hrs. act.

ART 3830 - Digital Imaging

Units: 4

Computers, scanners, digital cameras and drawing tablets to produce imaginative pictures for screen and print. *Prerequisites:* ART 2810 and ART 2830. Two hrs. lect., 4 hrs. act.

ART 3851 - Game Design and Scripting

Units: 4

Intermediate scripting languages, problem solving, and design patterns. Intermediate concepts for traditional and interactive game creation. *Prerequisites:* ART 3830 and ART 2851. Two hrs. lect., 4 hrs. act.

ART 3855 - Graphic Design II

Units: 4

Advanced applied design skills using grids, color, images, typographic detail, aesthetics, and extended design systems. Field trips may be required. *Prerequisites:* ART 3810 and ART 3815. Two hrs. lect., 4 hrs. act.

ART 3860 - Production Design for Print and Screen

Units: 4

Integration of software and hardware techniques and design production considerations, to create and deliver successful content for mass production. *Prerequisites:* ART 3810 and ART 3815. Two hrs. lect., 4 hrs. act.

ART 3870 - Web Authoring

Units: 4

Advanced use of scripting techniques to create interactive Web sites. *Prerequisites:* ART 2810 and ART 2830. May be repeated once for credit with consent of instructor and when content varies, for a maximum of 8 units. Two hrs. lect., 4 hrs. act.

ART 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites:* At least 2.0 GPA; departmental approval of activity. May be repeated for credit, for a maximum of 8 units, which may be applied to the major or the minor in Art.

ART 4143 - Advanced Drawing

Units: 4

Emphasis on individual expression using traditional two-dimensional drawing media integrated with new and mixed media. Field trips may be required. *Prerequisites:* ART 3141. May be repeated two times for credit with consent of instructor and when content varies, for a maximum of 12 units. Two hrs. lect., 4 hrs. act.

ART 4200 - Interactive Authoring

Units: 4

Scripting languages, audio, video, animation and graphics to build interactive environments. *Prerequisites:* ART 3800 and ART 3820. May be repeated once for credit with consent of instructor and when content varies, for a maximum of 8 units. Two hrs. lect., 4 hrs. act.

ART 4210 - Advanced Computers and Print

Units: 4

Combining digital and traditional fine art printmaking techniques to produce prints and artist's books. Field trips may be required. *Prerequisites:* ART 3830, ART 3860. May be repeated once for credit with consent of instructor and when content varies, for a maximum of 8 units. Two hrs. lect., 4 hrs. act.

ART 4220 - Multimedia Senior Project

Units: 4

Students produce a personal body of interactive media reflecting understanding of design skills and processes that parallel professional methods. *Prerequisites:* ART 3825 and ART 4200. May be repeated once for credit with consent of instructor and when content varies, for a maximum of 8 units. Two hrs. lect., 4 hrs. act.

ART 4230 - Graphic Design Senior Project

Units: 4

Students produce a personal body of graphics reflecting understanding of design skills and processes that parallel professional methods. *Prerequisites:* ART 3855 and ART 3860. May be repeated once for credit with consent of instructor and when content varies, for a maximum of 8 units. Two hrs. lect., 4 hrs. act.

ART 4370 - Human and Machine Performance

Units: 4

Performance as an artistic form. Integration of human and mechanical actions using microprocessor programming, robotics, and costume construction. Discussion of audience, body art, and cyborg theory. *Prerequisites:* ART 3370. Two hrs. lect., 4 hrs. act.

ART 4600 - Image and Idea

Units: 4

The development of each student's technical skill and personal vision. Documentary and fine art photography. *Prerequisites:* ART 3600/COMM 3600. May be repeated two times for credit, for a maximum of 12 units. Cross-listed COMM 4600. Two hrs. lect., 4 hrs. act.

ART 4645 - Creative Photography

Units: 4

Students work on individual photography projects with the goal of further developing their skills and personal direction.

Prerequisites: ART 4600/COMM 4600 or consent of instructor. May be repeated once for credit, for a maximum of 8 units. Two hrs. lect., 4 hrs. act.

ART 4710 - Senior Thesis

Units: 2

Senior exhibit of art works in appropriate department spaces. Part of a series of capstone senior courses.

ART 4720 - Senior Seminar

Units: 2

Development of students' written and verbal communication skills for the purpose of presenting themselves and their work.

ART 4730 - Senior Portfolio

Units: 2

Senior portfolio production and presentation for career oriented goals. Faculty participation in reviews of portfolios.

ART 4740 - Professional Practices

Units: 4

Contemporary professional practices in electronic arts. Students investigate venues for electronic artists, contexts for their own work, and produce a professional portfolio. *Prerequisites:* ART 3855 and ART 3860 or ART 3825 and ART 4200.

ART 4745 - Senior Project in Photography

Units: 4

Students work on individual photography projects with the goal of producing a body of work to be shown in a gallery for their senior thesis. *Prerequisites:* ART 4600/COMM 4600. Not open to students with credit for ART 4235. Two hrs. lect., 4 hrs. act.

ART 4857 - Advanced Printmaking

Units: 4

Studies in printmaking to clarify the student's direction as an artist. Field trips may be required. *Prerequisites:* Upper division standing. May be repeated for credit with consent of instructor and when content varies, for a maximum of 48 units. Two hrs. lect., 4 hrs. act.

ART 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

Biological Science

BIOL 1000 - Basic Concepts in Biology

Units: 5

Plants, animals and microorganisms and the modern biological concepts that apply to their structure and function on cellular,

organismal, population, and ecosystem levels. Special emphasis on humans and their relationships with other living things. Not for biology major or minor credit. Four hrs. lect., 3 hrs. lab.

BIOL 1001 - Introduction to Biology

Units: 4

Plants, animals and microorganisms and the modern biological concepts that apply to their structure and function on cellular, organismal, population, and ecosystem levels. Special emphasis on humans and their relationships with other living things. Recommended: concurrent enrollment in lab, BIOL 1005. Not open to students with credit for BIOL 1005 or BIOL 1007. Not for biology major or minor credit.

BIOL 1002 - Introduction to Biology Lab

Units: 1

Laboratory exposure to biological phenomena including microscope activities of cells, osmosis, diffusion, human nutrition, human genetics, plant growth, classification of plants and animals, fertilization and development, natural selection simulation, field ecology and ecosystems. *Prerequisite or Co-requisite: prior or concurrent enrollment in BIOL 1001 (or one of BIOL 1005, or BIOL 1007) or equivalent.* Not open to students with credit for BIOL 1004, or 2005. Not for biology major or minor credit. Two hrs. lab activity.

BIOL 1005 - How Things Work: The Human Body

Units: 4

A conceptual look at how important systems work, what they mean in an everyday way, and how they all fit together in one working unit...the human body. Not open to students with credit for BIOL 1001 or BIOL 1007. Not for biology major or minor credit.

BIOL 1007 - Human Biology

Units: 4

Human organisms, with emphasis placed on human structure and function; examination of relationships with the environment, including plants, animals, and microorganisms. Not open to students with credit for BIOL 1001 or BIOL 1005. Not for biology major or minor credit.

BIOL 1020 - Ecology and the Environment

Units: 4

Introduction to ecology of individuals, populations, communities, and ecosystems; interactions of organisms with their environment. Case studies of environmental issues that impact the ecology of organisms.

BIOL 1401 - Molecular and Cellular Biology

Units: 5

Introduction to molecular and cellular biology with emphasis on the integration of structure and function in the living cell as a biological system; cellular aspects of inheritance. Four hrs. lect., 3 hrs. lab.

BIOL 1402 - Plant Biology

Units: 5

An introduction to plant biology with emphasis on relationship of structure and function in plants, principles of classification and

ecology, and a brief survey of the plant kingdom, including evolutionary relationships. *Prerequisites:* BIOL 1401 or consent of instructor. Four hrs. lect., 3 hrs. lab.

BIOL 1403 - Animal Biology

Units: 5

An introduction to animal biology with emphasis on relationship of structure and function in animals, principles of classification and ecology, and a brief survey of the animal kingdom, including evolutionary relationships. *Prerequisites:* BIOL 1401 and BIOL 1402 or consent of instructor. Four hrs. lect., 3 hrs. lab.

BIOL 2010 - Human Physiology and Anatomy I

Units: 5

An integrated approach to essential concepts of human physiology and anatomy. Analysis of skeletal, muscular, sensorimotor, cardiovascular and respiratory systems. Recommended preparation: high school biology and chemistry, or BIOL 1001 (or BIOL 1005) and BIOL 1002; CHEM 1100 or CHEM 1601 (or CHEM 1605). Not open to students with credit for BIOL 2011. Not for Biology B.S. degree credit. Four hrs. lect., 3 hrs. lab.

BIOL 2011 - Anatomy and Physiology I

Units: 5

An integrated approach to health through the essential concepts of human physiology and anatomy. Analysis of skeletal, muscular, sensorimotor, cardiovascular and respiratory systems. Recommended preparation: high school biology and chemistry, or BIOL 1001 (or BIOL 1005) and BIOL 1002 (or BIOL 1005); CHEM 1100 or CHEM 1601 (or CHEM 1605). Not open to students with credit for BIOL 2010. Not for Biology B.S. degree credit. Four hrs. lect., 3 hrs. lab.

BIOL 2020 - Human Physiology and Anatomy II

Units: 5

An integrated analysis of physiology and anatomy of the integumentary, autonomic and central nervous, endocrine, urinary and reproductive systems and of the blood and special senses. Coverage of histology, metabolism, and thermoregulation. *Prerequisites:* BIOL 2010 (or BIOL 2011) or equivalent and CHEM 1100 (may be taken concurrently). Not open to students with credit for BIOL 2021. Not for Biology B.S. degree credit. Four hrs. lect., 3 hrs. lab.

BIOL 2021 - Anatomy and Physiology II

Units: 5

An integrated analysis of human physiology and anatomy of the integumentary, autonomic and central nervous, endocrine, urinary and reproductive systems and of the blood and special senses. Coverage of histology, metabolism, and thermoregulation. *Co-requisites:* BIOL 2010 (or BIOL 2011) or equivalent and CHEM 1100 (may be taken concurrently), or consent of instructor. Not open to students with credit for BIOL 2020. Not for Biology B.S. degree credit. Four hrs. lect., 3 hrs. lab.

BIOL 2025 - Introduction to Microbiology

Units: 5

The nature and activities of beneficial and harmful microorganisms; their role in health, disease, and their natural environment. Laboratory practice in handling microorganisms, including identification and culture techniques. Designed for health sciences and nursing. Not open to students with credit for BIOL 3005, BIOL 3405 or BIOL 4010. Not for Biology B.S. degree credit. Three hrs. lect, 6 hrs. lab.

BIOL 3011 - Foundational Biology

Units: 4

Lecture component of the Foundational Biology laboratory (BIOL 3012). Focus on the California State Science Standards and designed to prepare pre-service and in-service teachers for the CSET General Science Subtest in Biology with the goal of obtaining a Foundational Science Credential. *Prerequisites:* BIOL 1001 and BIOL 1002, BIOL 1000, *high school biology, or equivalent; satisfaction of the Entry Level Mathematics (ELM) requirement.* Not open to Biology majors.

BIOL 3012 - Foundational Biology Laboratory

Units: 1

Lecture component of the Foundational Biology laboratory (BIOL 3012). Laboratory component of the Foundational Biology lecture (BIOL 3011). Designed to prepare pre-service and in-service teachers for the CSET General Science Subtest in Biology with the goal of obtaining a Foundational Science Credential. *Prerequisites:* BIOL 1001 and BIOL 1002, or BIOL 1000, *high school biology, or equivalent; satisfaction of the Entry Level Mathematics (ELM) requirement. Prerequisite or Co-requisite: BIOL 3011.* Not open to Biology majors. Three hrs. lab.

BIOL 3020 - Genetics, Evolution, and Humanity

Units: 4

Principles of genetics, their application to human problems, and to theories of evolutionary change, including the evolution of humans. *Prerequisites:* BIOL 1001 (or BIOL 1005) and BIOL 1002 or equivalent. Not open to students with credit for BIOL 3121. Not for Biology B.S. degree credit.

BIOL 3065 - Humans and Sex

Units: 4

The genetic, hormonal and behavioral basis of sexuality in humans from conception to adulthood; developmental and behavioral variation; enhancement and suppression of fertility; genetic screening. Not for Biology B.S. degree credit.

BIOL 3070 - Human Nutrition

Units: 4

Key nutrients, including carbohydrates, lipids, proteins, vitamins, and minerals. Role each plays in human metabolism. Current controversies in nutritional information, including food supplements and claims for prevention of disease. *Prerequisites:* BIOL 1001 (or BIOL 1005) or equivalent. Not for Biology B.S. degree credit.

BIOL 3080 - Biology Hands-On Laboratory

Units: 2

Designed to give students the opportunity to work with elementary and middle school students in a science teaching and learning environment. The hands-on lessons provide early teaching experience in science for undergraduates interested in K-8 teaching as a career. GE Area B6, upper division science, is a 4-unit requirement. To complete the requirement, students must take an additional science 3080 course or an additional 4-unit course approved for B6. *Prerequisites:* BIOL 1000, BIOL 1001, consent of instructor required for biology majors.

BIOL 3110 - Principles of Ecology

Units: 4

Relationships within and among populations in various environments; introduction to population dynamics and species

interactions in natural communities and ecosystems; applications to human welfare. *Prerequisites:* BIOL 1402, BIOL 1403, MATH 1130 and STAT 3031 or equivalents; BIOL 1401 recommended. Three hrs. lect., 3 hrs. lab, and/or field trips.

BIOL 3121 - Principles of Genetics

Units: 5

Comprehensive analysis of gene structure, function, and inheritance incorporating classical and molecular-based approaches. Emphasis on the experimental evidence that has led to our current understanding of the nature of the gene, drawing on examples from bacteria to humans. *Prerequisites:* BIOL 1401, BIOL 1402, BIOL 1403 and CHEM 1101 or equivalents. Not open to students with credit for BIOL 3020. Four hrs. lect., 1 hr. disc.

BIOL 3122 - Principles of Developmental Genetic Analysis

Units: 4

Continuation of BIOL 3121. Aspects of development from subcellular to organismal phenomena, emphasizing current theories, techniques, and applications of cell biology and molecular genetics. *Prerequisites:* BIOL 1401, BIOL 1402, BIOL 1403, BIOL 3121; CHEM 1101, CHEM 1102, CHEM 1103 or CHEM 1601 (or CHEM 1605), CHEM 1602 or equivalents.

BIOL 3130 - Principles of Evolutionary Biology

Units: 4

A survey of the basic processes involved in the evolution of natural populations. The systematic and phylogenetic implications of evolutionary change will also be considered. *Prerequisites:* BIOL 1401, BIOL 1402, BIOL 1403 and BIOL 3121 or equivalents.

BIOL 3151 - Principles of Animal Physiology

Units: 5

Integrative approach to the principles involved in animal physiology. Covers the nervous, sensory, osmoregulatory, muscular, respiratory, circulatory, digestive, and endocrine systems facilitated by an understanding of the cellular processes governing these systems. Strongly Recommended: *STAT 3031 or equivalent*. *Prerequisites:* BIOL 1401, BIOL 1402, BIOL 1403; CHEM 1101, CHEM 1102, CHEM 1103 or equivalent. Not open to students with credit or BIOL 3150. Four hrs. lect., 3 hrs. lab.

BIOL 3215 - Marine Biology

Units: 4

The general biology of marine organisms with emphasis on the ecology of local marine communities. *Prerequisites:* BIOL 1402 and BIOL 1403 or equivalents. Not open to students with credit for BIOL 3115 or MSC 4103. Two hrs. lect., 6 hrs. lab.

BIOL 3216 - Freshwater Environments

Units: 4

Comparisons of freshwater physical and biological environments with their major communities of plants and animals. *Prerequisites:* Upper-division standing in biology, environmental science, environmental studies, or geology major, or consent of instructor. Not open to students with credit for BIOL 3116. Three hrs. lect., 3 hrs. lab.

BIOL 3405 - Microbiology

Units: 6

The general biology of major groups of microorganisms, including their morphology, metabolism, reproduction, genetics and

ecology. *Prerequisites:* BIOL 1401, BIOL 1402, BIOL 1403 or equivalents, organic chemistry. Not open to students with credit for BIOL 2025, 3005 or BIOL 4010. Four hrs. lect., 6 hrs. lab.

BIOL 3410 - Epidemiology

Units: 4

Study of the distribution and determinants of disease and health-related aspects in populations. Application of results to the prevention and control of health problems. *Prerequisites:* BIOL 1000 and BIOL 2025 or permission of instructor.

BIOL 3430 - Hematology

Units: 4

Morphology, function and composition of human blood fluids and cells, both normal and diseased. *Prerequisites:* BIOL 1401 and BIOL 1403 and organic chemistry. Two hrs. lect., 6 hrs. lab.

BIOL 3435 - Principles of Microbiology

Units: 3

A study of microorganisms and their biology with regard to their life cycles, virulence, host interactions, ecology, and control. Focus on mechanisms of human infection and disease. *Prerequisites:* BIOL 1401, BIOL 1402, BIOL 1403, or equivalents, organic chemistry. Not open for credit to students in the B.S. Microbiology/Biomedical Laboratory Science Option. *A-F grading only.*

BIOL 3441 - Biomedical Parasitology

Units: 4

Study of protozoa and metazoa important in the pathogenesis of human diseases, including pathology, immunology and epidemiology, identification and life cycles. *Prerequisites:* BIOL 1401 and BIOL 1403 or equivalent. Not open to those with credit for BIOL 3440.

BIOL 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites:* At least 2.0 GPA; departmental approval of activity. No more than a total of four units of BIOL 3898, BIOL 4900, BIOL 6898, or BIOL 6900 or a combination thereof, may be applied to the Biology majors. May be repeated for credit, for a maximum of 8 units, but only up to four units are applicable to the biology major.

BIOL 3999 - Issues in Biological Science

Units: 2-4

Readings, discussion, and research on contemporary and/or significant issues in biological science. May be repeated for credit when content varies, for a maximum of 8 units.

BIOL 4010 - Microbes and Humanity

Units: 4

Historical review of microbial organisms, their role in causing disease and beneficial contribution to humanity. *Prerequisites:* BIOL 1001 (or BIOL 1005), and BIOL 1002 or equivalents. Does not meet Nursing prerequisite requirements. For Liberal

Studies, Biology majors (B.A. only), and General Education (Lifelong Understanding). Not open to students with credit for BIOL 2025, 3005 or BIOL 3405.

BIOL 4130 - Biogeography

Units: 4

Study of the distribution of organisms; the evolution and ecology of biomes, their biotas, dispersal, change in range, phylogenetic systematics and islands. *Prerequisites:* BIOL 1402 and BIOL 1403 or equivalents. Cross-listed GEOG 4130.

BIOL 4142 - Microbial Symbioses

Units: 4

Addresses symbiotic associations relevant to human medicine, veterinary sciences and agriculture, with emphasis on interactions that lead to the establishment of stable symbioses of plants, animals, and other microorganisms. *Prerequisites:* BIOL 3405 or consent of instructor. A-F grading only.

BIOL 4143 - Molecular Microbiology

Units: 4

Provides a deeper understanding of the molecular principles underlying basic microbial processes, such as regulation of growth, molecular determination of virulence, and phylogenetic relationships between microorganisms. *Prerequisites:* BIOL 3121, BIOL 3405 or consent of instructor. A-F grading only.

BIOL 4150 - Mammalian Physiology

Units: 4

Mammalian physiological systems with particular emphasis on homeostasis and mechanisms of muscle, cardiovascular, respiratory, renal, and acid-base physiology. *Prerequisites:* BIOL 2010 (or BIOL 2011) and BIOL 2020; or BIOL 3151; or equivalents.

BIOL 4160 - Medical Physiology

Units: 4

Particular emphasis on human pathophysiology, its etiology, diagnosis, and the physiologic rationale for treatment of multiple system disease, entities, and/or failures. *Prerequisites:* BIOL 2010 (or BIOL 2011) and BIOL 2020, or BIOL 3151 or equivalent, or consent of instructor.

BIOL 4175 - Population Biology

Units: 4

Study of the sizes and distributions of plant and animal populations. Processes affecting reproduction, age structure, density and population fluctuations. Recommended for students interested in ecology, conservation, or environmental biology. *Prerequisites:* BIOL 3110 or equivalent and statistics or consent of instructor. Three hrs. lect., 3 hrs. lab.

BIOL 4340 - Environmental Microbiology

Units: 4

Key positions that microorganisms occupy in nature and their effects on global ecosystems; includes bioremediation, disease transmission/public health, biogeochemical cycling, plant-animal-insect-microbe interactions. *Prerequisites:* BIOL 3405.

BIOL 4351 - Biological Conservation

Units: 4

Principles and theories of conservation biology, including biodiversity, extinction, habitat fragmentation, captive-breeding programs, restoration ecology, and the role of humans in western U.S. *Prerequisites:* BIOL 1401, 1402, BIOL 1403, BIOL 3110 *or equivalent*. Not open to students with credit for BIOL 4350, 6350 or BIOL 6351.

BIOL 4355 - Global Change Biology

Units: 4

Understanding the mechanisms by which plants, animals and ecosystems are responding to global change and the links between physical, chemical and biological systems and anthropogenic activities. *Prerequisites:* BIOL 3151 *or equivalent or permission of instructor*. A-F grading only.

BIOL 4405 - Microbial Physiology and Biochemistry

Units: 4

Emphasis on the study of microbial function and biology required to fully understand microbial growth relevant to medical and economic importance, including the exploitation of microbial processes for biotechnological advancement. *Prerequisites:* BIOL 3405 and CHEM 3400, *or equivalent*.

BIOL 4413 - Medical Microbiology

Units: 6

Introduction to medical microbiology using a system-based approach. Microbial basis of infection, host response, antibiotic resistance, prevention and public health measures. *Prerequisites:* BIOL 3405 *or consent of instructor*. Not open to students with credit for BIOL 4411 or 4412. A-F grading only. Four hrs. lect., 6 hrs. lab.

BIOL 4420 - Genetics Laboratory

Units: 4

Introduction to genetic analysis including classical experiments with viruses, bacteria and fruit flies. Implementation of genetic variants in DNA technology. *Prerequisites:* BIOL 3121 *or equivalent*. Two hrs. lect, 6 hours lab.

BIOL 4425 - Biology of Fungi

Units: 4

Survey of the major lineages of Kingdom Fungi, including classification, evolution, life cycles, ecology, morphology and development, with specific focus on the medical, clinical, economic and cultural applications and significance of this diverse group of organisms. *Prerequisites:* BIOL 1401, BIOL 1402, BIOL 1403, *or consent of instructor*. A-F grading only. Lecture/Lab.

BIOL 4430 - Immunology

Units: 4

Specific and nonspecific reactions in immunity; manifestations of antigen-antibody reactions, hypersensitivity and transplantation immunity. *Prerequisites:* BIOL 1401, BIOL 1402, BIOL 1403, BIOL 3121; CHEM 2301, CHEM 2302 *or* CHEM 3301, CHEM 3302, CHEM 3303.

BIOL 4435 - Water Quality and Human Health

Units: 4

Exploration of the connections between water quality and human health. Topics include the influence of waterborne pathogens on human health, detection of microbes in the environment, transmission and fate of health-related microbes, and water quality regulation. *Prerequisites: BIOL 3405 or consent of instructor. A-F grading only.*

BIOL 4441 - Principles of Virology

Units: 4

Survey of the DNA and RNA viruses of bacteria, plants and animals. Focus on the molecular mechanisms of infection and replication, including viruses of biomedical importance such as HIV, subviral particles, prions and viroids. *Prerequisites: BIOL 3121. Not open to students with credit for BIOL 6441 .*

BIOL 4450 - Cell Culture Techniques

Units: 4

Techniques of in vitro culture of primary and established cell lines of multi-cellular origin. Topics include nutrition, growth, cloning, cell fusion, transformation, preservation, karyotyping, autoradiography, metabolic labeling, quality control applications. *Prerequisites: Permission of instructor. Two hrs. lect., 6 hrs. lab.*

BIOL 4455 - Molecular Cell Biology

Units: 4

In-depth look at molecular aspects of cellular processes; emphasis on experimental evidence of molecular mechanisms responsible for implementation and regulation of gene expression, protein synthesis, membrane transport, intracellular transport, cell signaling, and cell division. *Prerequisites: BIOL 3121, BIOL 3122, CHEM 3400 or equivalents.*

BIOL 4456 - Molecular Techniques

Units: 3

Techniques utilized in contemporary experimental cell biology; laboratory studies designed to mimic, in practical fashion, the usual course a researcher takes in examining an experimental question relevant to cell biology. Study will include a broad range of experimental techniques including: polymerase chain reaction (PCR), recombinant DNA construction, advanced genetic analysis, protein detection, isolation and analysis, and microscopy. *Prerequisite or Co-requisite: completion of, or concurrent enrollment in BIOL 4455. One hr. lect., 6 hrs. lab.*

BIOL 4485 - PCR, DNA Sequencing and Fragment Analysis

Units: 4

Laboratory course covering the theory and applications of PCR, DNA sequencing and Fragment Analysis. Topics include DNA sequencing and sequence analysis, genomic PCR, quantitative PCR, RT-PCR, DNA fingerprinting and an individual project. *Prerequisites: BIOL 1401 and BIOL 3121 or equivalent. One hr. lect., 9 hours lab.*

BIOL 4490 - Bioinformatics

Units: 4

Introduction to Molecular Bioinformatics. Survey of concepts and methods for assembly, comparison, and annotation of DNA sequence data. Analysis of protein structure and function. Phylogenetic analysis, database techniques, and selected molecular biology applications. *Prerequisites: BIOL 3121 or equivalent, and consent of instructor. Two hrs. lect., 6 hrs. lab.*

BIOL 4500 - Quantitative Methods in Physiology

Units: 2

Quantitative treatment and analysis of physiological data using modern methods including applied statistics, spread sheets, graphical methods and data presentation. *Prerequisites:* BIOL 3151, STAT 3031, or consent of instructor. Not open to students with credit for BIOL 6500.

BIOL 4504 - Comparative Physiology

Units: 4

Physiology of metabolic, respiratory, circulatory, excretory, muscle, and nervous systems of vertebrate and invertebrate animals with an emphasis on physiological diversity and adaptation. *Prerequisites:* BIOL 3151 or consent of instructor. Not open to students with credit for BIOL 6504.

BIOL 4505 - General Endocrinology

Units: 4

Anatomy, physiology, and biochemistry of the endocrine system in vertebrate and invertebrate organisms. *Prerequisites:* BIOL 3150.

BIOL 4506 - Animal Physiology Laboratory

Units: 3

The examination of regulatory mechanisms of animal organ systems using controlled laboratory experiments, with an emphasis on experimental design and data analysis. May be taken concurrently or following BIOL 4504 (Comparative Physiology) or BIOL 4516 (Environmental Animal Physiology). *Prerequisites:* BIOL 3151 or equivalent, or consent of instructor. Not open to students with credit for BIOL 6506. One hr. lect., 6 hrs. lab.

BIOL 4510 - Neurobiology

Units: 4

The structure and function of the vertebrate and invertebrate nervous system with emphasis on the principles of communication, control, and sensorimotor responses. Survey of concepts of neurochemistry, feedback, bionic models, and higher brain processes. *Prerequisites:* BIOL 3151 or BIOL 2010 (or BIOL 2011), BIOL 2020 or consent of instructor. Not open to students with credit for BIOL 6515.

BIOL 4512 - Applied Neurobiology

Units: 4

Basic principles of neurobiology demonstrated using laboratory experiments that include intracellular and extracellular nerve recording, membrane potentials, action potentials, sensory and motor neural processing, nerve tracing, and histology. *Prerequisites:* BIOL 4510 or consent of instructor. Two hrs. lect., 6 hrs. lab.

BIOL 4513 - Animal Senses

Units: 4

Survey of how animals use remarkable sensory abilities to communicate, navigate, and detect prey, predators and mates. We will focus on extreme and unusual sensory systems such as echolocation, electroreception, and magnetoreception, as well as vision, smell, touch, and hearing. *Prerequisites:* BIOL 3151 or permission of instructor.

BIOL 4516 - Environmental Animal Physiology

Units: 4

An examination of the physiological adaptations that animals use to cope with their environments, emphasizing the physiological responses of species to extreme environments. *Prerequisites:* BIOL 3151 or equivalent, or consent of instructor. Not open to students with credit for BIOL 6516.

BIOL 4517 - Environmental Toxicology

Units: 4

Exploration of the physiological effects of exposure to environmental toxicants in animals, from the subcellular to organismal levels. Concepts covered include routes of exposure, modes of action, and metabolism, as well as how toxicants are monitored and regulated. *Prerequisites:* BIOL 3151, CHEM 4411, or equivalents, or consent of instructor. A-F grading only.

BIOL 4518 - Animal Behavior

Units: 4

Behavior patterns of animals; sensory adaptations, perception, orientation, imprinting instinct and learning, social and reproductive behavior; communication; emphasis on evolutionary relations. *Prerequisites:* BIOL 1401, BIOL 1402, BIOL 1403 or equivalents. Three hrs. lect., 3 hrs. lab./field.

BIOL 4525 - Neural Development

Units: 4

Survey of various aspects of vertebrate and invertebrate neural development including neurogenesis, neuron polarity, axon/dendrite guidance, target selection and synapse formation. *Prerequisites:* BIOL 3121 or consent of instructor. A-F grading only.

BIOL 4530 - Ecological Methods

Units: 4

Methods of design and analysis of ecological studies, including sampling techniques, field and laboratory measurements, and computer-aided data analysis including introductory modeling. Recommended for students interested in advanced study in ecology or conservation or environmental biology. *Prerequisites:* BIOL 1401, BIOL 1402, BIOL 1403 or equivalents, and BIOL 3110. *Recommended statistics course.* Three hrs. lect., 3 hrs. lab/field.

BIOL 4583 - Vertebrate Biology

Units: 4

Overview of vertebrate origins, phylogeny, structural and functional adaptations, behavior, and ecology. *Prerequisites:* BIOL 1401, BIOL 1402, BIOL 1403. Two hrs. lect., 6 hrs. lab.

BIOL 4820 - Biology Seminar

Units: 1

Guest speakers describe their biological research and develop a dialogue between faculty and students. *Prerequisites:* One course in biology. Not for credit toward G.E.-Breadth Requirements. May be repeated once for credit, for a maximum of 2 units.

BIOL 4830 - Seminar in Forensic Research

Units: 1

Seminar on biological aspects of forensic research. Current issues in forensic science based on biological concerns.

BIOL 4900 - Independent Study

Units: 1-4

Individual projects or limited reading for students competent to assume individual work. Admission requires approval of professor and department chair. May be repeated for credit with consent of instructor, for a maximum of 12 units. No more than a total of 4 units of BIOL 3898, 4900, BIOL 6898, or BIOL 6900 or a combination thereof, may be applied to the Biology majors.

Biological Science: Graduate

BIOL 6120 - Environmental Experimental Analysis

Units: 4

Advanced applications of graphic modeling, experimental design, direct and remote monitoring, and modern statistical analyses of ecological/physiological experiments. *Prerequisites: graduate standing in biology or consent of instructor.*

BIOL 6141 - Advanced Molecular Techniques

Units: 4

A laboratory course covering the theory, practice and application of advanced techniques in molecular biology through guided research projects and discussions of the primary literature. Techniques include current methods in recombinant DNA construction, nucleic acid isolation and gene expression analysis.

BIOL 6142 - Microbial Symbioses

Units: 4

Addresses symbiotic associations relevant to human medicine, veterinary sciences and agriculture, with emphasis on interactions that lead to the establishment of stable symbioses of plants, animals, and other microorganisms. *A-F grading only.*

BIOL 6143 - Molecular Microbiology

Units: 4

Provides a deeper understanding of the molecular principles underlying basic microbial processes, such as regulation of growth, molecular determination of virulence, and phylogenetic relationships between microorganisms. *A-F grading only.*

BIOL 6147 - Functional Genomics

Units: 4

Laboratory course covering genome-wide analysis of gene function, including data-mining, mutant analysis, and expression profiling; discussion of original literature.

BIOL 6151 - Cell and Molecular Biology I

Units: 5

The cellular and molecular biology of eucaryote cells emphasizing membrane structure and function, structure of genetic material, control of gene expression, and protein synthesis, cell division and differentiation.

BIOL 6152 - Cell and Molecular Biology II

Units: 5

The cellular and molecular biology of eucaryote cells emphasizing membrane structure and function, structure of genetic material, control of gene expression, and protein synthesis, cell division and differentiation.

BIOL 6175 - Population Biology

Units: 4

Study of the sizes and distributions of plant and animal populations. Processes affecting reproduction, age structure, density and population fluctuations. Recommended for students interested in ecology, conservation, or environmental biology. Required project, designed, implemented and analyzed by student. Not open to students with credit for BIOL 4175.

BIOL 6180 - Estuarine Wetlands Ecology

Units: 4

Advanced applications of modern ecological research in bay shore environments. Emphasis on field experimentation along vertical and horizontal estuarine gradients of both physical and biotic factors, particularly salinity, desiccation, predation, and competition for various resources.

BIOL 6340 - Environmental Microbiology

Units: 4

Key positions that microorganisms occupy in nature and their effects on global ecosystems; includes bioremediation, disease transmission/public health, biogeochemical cycling, plant-animal-insect-microbe interactions. Required project, designed, implemented and analyzed by student. Not open to students with credit for BIOL 4340.

BIOL 6351 - Global Change Biology

Units: 4

Understanding the mechanisms by which plants, animals and ecosystems are responding to global change and the links between physical, chemical and biological systems and anthropogenic activities. Required project, designed, implemented, and analyzed by student. Not open to students with credit for BIOL 4355. *A-F grading only.*

BIOL 6355 - Biological Conservation

Units: 4

Principles and theories of conservation biology, including biodiversity, extinction, habitat fragmentation, captive-breeding programs, restoration ecology, and the role of humans in western U.S. Not open to students with credit for BIOL 4350, BIOL 4351, or 6350. *A-F grading only.*

BIOL 6405 - Microbial Physiology and Biochemistry

Units: 4

Emphasis on the study of microbial function and biology required to fully understand microbial growth relevant to medical and economic importance, including the exploitation of microbial processes for biotechnological advancement. Graduate project required. Not open to those with credit for BIOL 4405.

BIOL 6435 - Water Quality and Human Health

Units: 4

Exploration of the connections between water quality and human health. Topics include the influence of waterborne pathogens on

human health, detection of microbes in the environment, transmission and fate of health-related microbes, and water quality regulation. *A-F grading only.*

BIOL 6441 - Principles of Virology

Units: 4

Survey of the DNA and RNA viruses of bacteria, plants and animals. Focus on the molecular mechanisms of infection and replication, including viruses of biomedical importance such as HIV, subviral particles, prions and viroids. This is a tiered course (with BIOL 4441) in which students will be required to complete an advanced virology project. Not open to students with credit for BIOL 4441. Not recommended for undergraduates. *A-F grading only.*

BIOL 6500 - Quantitative Methods in Physiology

Units: 2

Quantitative treatment and analysis of physiological data using modern methods including applied statistics, spread sheets, graphical methods and data presentation. Not open to students with credit for BIOL 4500.

BIOL 6504 - Comparative Physiology

Units: 4

Physiology of metabolic, respiratory, circulatory, excretory, muscle, and nervous systems of vertebrate and invertebrate animals with an emphasis on physiological diversity and adaptation. Required project, designed, implemented and analyzed by student. Not open to students with credit for BIOL 4504.

BIOL 6506 - Animal Physiology Laboratory

Units: 3

Examination of regulatory mechanisms of animal organ systems using controlled laboratory experiments, with an emphasis on experimental design and data analysis. An independent research project and oral presentation of these results will be required. May be taken concurrently or following BIOL 6504. Not open to students with credit for BIOL 4506.

BIOL 6513 - Animal Senses

Units: 4

Advanced study of how animals use remarkable sensory abilities to communicate, navigate, and detect prey, predators and mates. We will focus on extreme and unusual sensory systems such as echolocation, electroreception, and magnetoreception, as well as vision, smell, touch, and hearing.

BIOL 6515 - Neurobiology

Units: 4

The structure and function of the vertebrate and invertebrate nervous system with emphasis on the principles of communication, control, and sensorimotor responses. Survey of concepts of neurochemistry, feedback, learning, and high brain processes. Students are required to make oral and written presentations of a current topic in neurobiology. Not open to students with credit for BIOL 4510.

BIOL 6517 - Environmental Toxicology

Units: 4

Exploration of the physiological effects of exposure to environmental toxicants in animals, from the subcellular to organismal

levels. Concepts covered include routes of exposure, modes of action, and metabolism, as well as how toxicants are monitored and regulated. Oral presentation and terminal assignment required. *A-F grading only.*

BIOL 6520 - Mammalian Physiology Laboratory

Units: 3

Advanced treatment of regulatory mechanisms in mammalian organ systems. Laboratory techniques of anesthesia, surgery, instrumentation and data analysis. Emphasis on cardiovascular, respiratory, renal and gastrointestinal physiology. Terminal project required. Not open to students with credit for BIOL 4520.

BIOL 6525 - Neural Development

Units: 4

Survey of various aspects of vertebrate and invertebrate neural development including neurogenesis, neuron polarity, axon/dendrite guidance, target selection and synapse formation. *A-F grading only.*

BIOL 6801 - Graduate Seminar-Ecology

Units: 3

A seminar in ecology, with a different theme or subject area to be chosen each year. Course based on papers presented by students enrolled.

BIOL 6811 - Graduate Seminar-Physiology

Units: 3

A seminar course dependent upon papers presented by students enrolled. The specific subject area of physiology will be chosen each year.

BIOL 6821 - Graduate Seminar in Cell and Molecular Biology

Units: 3

A seminar course involving presentation and discussion of current research literature in cell and molecular biology. The specific subject matter will be at the discretion of the instructor.

BIOL 6822 - Biotechnology Colloquium

Units: 4

Biotechnology as science and business. Therapeutics research/design, diagnostics, and marketing analyzed via student presentations/industry guest speakers.

BIOL 6898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities.

BIOL 6900 - Independent Study

Units: 1-4

BIOL 6901 - Comprehensive Examination Preparation

Units: 2

Preparation for graduate comprehensive examination. Directed readings and review of sample questions. Classified graduate student in Biological Sciences. Declared Plan C. May not be repeated for credit. *CR/NC grading only.*

BIOL 6905 - Preparation for Undergraduate Instruction in STEM

Units: 4

Preparation for graduate students for the roles and responsibilities of the Biology Teaching Associate (TA) with training in disciplinary pedagogy, policies, and safety. Provides opportunities to develop teaching skills, access resources, receive feedback, and establish a support network. *Prerequisites:* Graduate student status. *ABC/NC grading only.*

BIOL 6910 - University Thesis

Units: 1-9

Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See "University Thesis Writing Guide," available online at www.csueastbay.edu/thesiswritingguide.) *CR/NC grading only.*

BIOL 6999 - Issues in Biological Science

Units: 2-4

Readings, discussion, and research on contemporary and/or significant issues in biological science.

Biostatistics: Graduate

BSTA 6651 - Analysis of Categorical Data in Biostatistics

Units: 4

Applied methods for discrete data in Biostatistics. Topics may include: proportions and counts, contingency tables, loglinear models, logistic regression, Poisson regression, generalized linear models. Data integrity. Computing techniques and analysis of discrete data. Use of SAS. Report writing. Cross-listed STAT 6651.

BSTA 6652 - Survival Analysis in Biostatistics

Units: 4

Applied methods for survival analysis in Biostatistics. Incomplete data, censored and truncated data, life tables, nonparametric methods, parametric methods, accelerated failure time models, proportional hazards models, partial likelihood, advanced topics. Data integrity. Computing techniques and analysis of clinical data. Use of SAS. Report writing.

BSTA 6653 - Clinical Trials in the Pharmaceutical and Biomedical Industries

Units: 4

Statistical principles, design, and management of clinical trials. Recruitment, treatment allocation, randomization, blocking, and blinding. Practical applications of advanced statistical procedures for clinical trial data. Ethics of clinical trials design, data collection, data analysis and reporting. Data integrity. Data monitoring. Domestic/International regulatory guidelines emphasized. Use of SAS. Professional protocols are studied. Formal report writing and oral presentation.

BSTA 6690 - Statistical Bioinformatics

Units: 4

Statistical analysis of genomic data. Includes probability and statistics application to DNA sequence analysis, phylogenetic inference, statistical population genetics and genetic mapping, statistical molecular evolution, and macromolecular structure prediction. Emphasis on large datasets. *A-F grading only.*

BSTA 6843 - Selected Topics in Biostatistics

Units: 4

Topics in biostatistics. Variable content to be specified at time of offering. Cross-listed STAT 6843-STAT 6849.

BSTA 6844 - Selected Topics in Biostatistics

Units: 4

Topics in biostatistics. Variable content to be specified at time of offering. Cross-listed STAT 6843-STAT 6849.

BSTA 6845 - Selected Topics in Biostatistics

Units: 4

Topics in biostatistics. Variable content to be specified at time of offering. Cross-listed STAT 6843-STAT 6849.

BSTA 6846 - Selected Topics in Biostatistics

Units: 4

Topics in biostatistics. Variable content to be specified at time of offering. Cross-listed STAT 6843-STAT 6849.

BSTA 6847 - Selected Topics in Biostatistics

Units: 4

Topics in biostatistics. Variable content to be specified at time of offering. Cross-listed STAT 6843-STAT 6849.

BSTA 6848 - Selected Topics in Biostatistics

Units: 4

Topics in biostatistics. Variable content to be specified at time of offering. Cross-listed STAT 6843-STAT 6849.

BSTA 6849 - Selected Topics in Biostatistics

Units: 4

Topics in biostatistics. Variable content to be specified at time of offering. Cross-listed STAT 6843-STAT 6849.

BSTA 6999 - Issues in Biostatistics

Units: 4

Readings, discussion, research, and applications on contemporary and/or significant issues in Biostatistics.

Chemistry

CHEM 1101 - General Chemistry

Units: 5

Fundamental principles of chemistry, chemical structure, bonding, equilibrium, dynamics, and reactions. Laboratory includes study of chemical and physical behavior of elements and compounds, and qualitative and quantitative analysis. *Prerequisites:* CHEM 1100, *one year high school chemistry, two years high school mathematics, and one year high school physics are recommended.* CHEM 1101 is prerequisite to CHEM 1102; CHEM 1102 is prerequisite to CHEM 1103. Three hrs. lect., 6 hrs. lab. each.

CHEM 1102 - General Chemistry

Units: 5

Fundamental principles of chemistry, chemical structure, bonding, equilibrium, dynamics, and reactions. Laboratory includes study of chemical and physical behavior of elements and compounds, and qualitative and quantitative analysis. *Prerequisites:* CHEM 1100, *one year high school chemistry, two years high school mathematics, and one year high school physics are recommended.* CHEM 1101 is prerequisite to CHEM 1102; CHEM 1102 is prerequisite to CHEM 1103. Three hrs. lect., 6 hrs. lab. each.

CHEM 1103 - General Chemistry

Units: 5

Fundamental principles of chemistry, chemical structure, bonding, equilibrium, dynamics, and reactions. Laboratory includes study of chemical and physical behavior of elements and compounds, and qualitative and quantitative analysis. *Prerequisites:* CHEM 1100, *one year high school chemistry, two years high school mathematics, and one year high school physics are recommended.* CHEM 1101 is prerequisite to CHEM 1102; CHEM 1102 is prerequisite to CHEM 1103. Three hrs. lect., 6 hrs. lab. each.

CHEM 1111 - General Chemistry Supplemental Instruction

Units: 0.5

Student-centered discussion and problem-solving. Designed to promote understanding of key concepts and enhance student success in the concurrent chemistry course (CHEM 1101). *Co-requisites:* CHEM 1101. Not for credit in Chemistry major. *CR/NC grading only.*

CHEM 1112 - General Chemistry Supplemental Instruction

Units: 0.5

Student-centered discussion and problem-solving. Designed to promote understanding of key concepts and enhance student success in the concurrent chemistry course (CHEM 1102). *Co-requisites:* CHEM 1102. Not for credit in Chemistry major. *CR/NC grading only.*

CHEM 1113 - General Chemistry Supplemental Instruction

Units: 0.5

Student-centered discussion and problem-solving. Designed to promote understanding of key concepts and enhance student success in the concurrent chemistry course (CHEM 1103). *Co-requisites:* CHEM 1103. Not for credit in Chemistry major. *CR/NC grading only.*

CHEM 1601 - Basic Chemistry for the Health Sciences

Units: 4

A two quarter, terminal sequence in chemistry for students preparing for careers in health-related sciences including nursing. CHEM 1601: basic inorganic chemistry. *Prerequisites: A score of 42 or above on the Entry Level Math Test or a college level math score on the SAT, ACT or AP exam or the equivalent.* CHEM 1601 is not open to students with credit for CHEM 1605. CHEM 1601 (or CHEM 1605) is prerequisite to CHEM 1602. Does not satisfy chemistry requirement for physical science, geology, physics or biology B.S. majors. Three hrs. lect., 3 hrs. lab. each.

CHEM 1602 - Basic Chemistry for the Health Sciences

Units: 4

A two quarter, terminal sequence in chemistry for students preparing for careers in health-related sciences including nursing. CHEM 1602: basic organic chemistry and introduction to biochemistry. *Prerequisites: A score of 42 or above on the Entry Level Math Test or a college level math score on the SAT, ACT or AP exam or the equivalent.* CHEM 1601 (or CHEM 1605) is prerequisite to CHEM 1602. Does not satisfy chemistry requirement for physical science, geology, physics or biology B.S. majors. Three hrs. lect., 3 hrs. lab. each.

CHEM 1610 - Survey of Basic Chemistry for Health Sciences

Units: 6

One quarter, terminal course in chemistry for students preparing for careers in health-related sciences including nursing. Covers basic inorganic and organic chemistry, and an introduction to biochemistry. *Not open to students with credit for CHEM 1601, CHEM 1605 or CHEM 1615. A-F grading only.* 5 hours lecture, 3 hours lab.

CHEM 1615 - Survey of Basic Chemistry for Healthier Living

Units: 6

A chemical perspective for healthier living. Covers basic inorganic and organic chemistry, and an introduction to biochemistry. *Not open to students with credit for CHEM 1601, CHEM 1605 or CHEM 1610. A-F grading only.* 5 hours lecture, 3 hours lab.

CHEM 2200 - Quantitative Analysis

Units: 5

Elementary gravimetric and volumetric analysis; instrumental methods of analysis. *Prerequisites: CHEM 1103.* Three hrs. lect., 6 hrs. lab.

CHEM 2301 - Survey of Organic Chemistry

Units: 4

Classes of organic compounds and reactions emphasizing subjects in biological sciences. *Prerequisites: CHEM 1103, CHEM 2301 is prerequisite to CHEM 2302. For non-chemistry majors not planning advanced work in organic chemistry.* 3 hrs. lect., 3 hrs. lab

CHEM 2302 - Survey of Organic Chemistry

Units: 4

Classes of organic compounds and reactions emphasizing subjects in biological sciences. *Prerequisites: CHEM 1103, CHEM 2301 is prerequisite to CHEM 2302. For non-chemistry majors not planning advanced work in organic chemistry.* 3 hrs. lect., 3 hrs. lab

CHEM 3080 - Chemistry Hands-On Laboratory

Units: 2

Designed to give students the opportunity to work with elementary and middle school students in a science teaching/learning environment. The hands-on lessons provide early teaching experience in science for undergraduates exploring teaching as a career. *Prerequisites:* CHEM 1100.

CHEM 3200 - Bioanalytical and Forensic Instrumentation

Units: 4

Introduction to biotechnical and forensic laboratory analytical methods, including preparation of biological and other forensic samples for analysis. Operation and data analysis of instruments such as HPLC, GC, GC/MS and AA. *Prerequisites:* CHEM 2302 or CHEM 3303. Two hrs. lect., 6 hrs. lab.

CHEM 3301 - Organic Chemistry

Units: 5

An introduction to the chemistry of aliphatic, aromatic, and heterocyclic compounds emphasizing basic principles. Laboratory work in basic techniques and synthesis. *Prerequisites:* CHEM 1103; CHEM 3301 is prerequisite to CHEM 3302; CHEM 3302 is prerequisite to CHEM 3302. Three hrs. lect., 6 hrs. lab. each.

CHEM 3302 - Organic Chemistry

Units: 5

An introduction to the chemistry of aliphatic, aromatic, and heterocyclic compounds emphasizing basic principles. Laboratory work in basic techniques and synthesis. *Prerequisites:* CHEM 1103; CHEM 3301 is prerequisite to CHEM 3302; CHEM 3302 is prerequisite to CHEM 3303. Three hrs. lect., 6 hrs. lab. each.

CHEM 3303 - Organic Chemistry

Units: 5

An introduction to the chemistry of aliphatic, aromatic, and heterocyclic compounds emphasizing basic principles. Laboratory work in basic techniques and synthesis. *Prerequisites:* CHEM 1103; CHEM 3301 is prerequisite to CHEM 3302; CHEM 3302 is prerequisite to CHEM 3303. Three hrs. lect., 6 hrs. lab. each.

CHEM 3400 - Introductory Biochemistry

Units: 4

A survey of biochemistry emphasizing the structure and metabolism of biomolecules such as amino acids, proteins, carbohydrates, lipids and nucleic acids. *Prerequisites:* CHEM 1602 or CHEM 2302 or CHEM 3303.

CHEM 3405 - Clinical Chemistry

Units: 5

Biochemical processes associated with disease; principles underlying the use of laboratory tests to monitor human health; quantitation of body fluid constituents such as enzymes, carbohydrates, cholesterol, hormones and other metabolites. *Prerequisites:* CHEM 3400 and CHEM 3401. Three hrs. lect., 6 hrs. lab.

CHEM 3501 - Biophysical Chemistry

Units: 4

A presentation of the fundamental concepts of physical chemistry with emphasis on the study of the structure and properties of biological macromolecules. Thermodynamics, spectroscopy, X-ray diffraction, chemical equilibria, ultracentrifugation, electrophoresis, and molecular interactions in solution will be covered. *Prerequisites: CHEM 1103, MATH 1305, and PHYS 2703.*

CHEM 3511 - Physical Chemistry Lecture

Units: 3

Fundamental physical laws, theoretical principles and mathematical relations of chemistry. *Prerequisites: MATH 2304 and PHYS 1003 (or concurrent) or PHYS 2703.* CHEM 3511 is prerequisite to CHEM 3512; CHEM 3512 is prerequisite to CHEM 3513.

CHEM 3512 - Physical Chemistry Lecture

Units: 3

Fundamental physical laws, theoretical principles and mathematical relations of chemistry. *Prerequisites: CHEM 2200, MATH 2304 and PHYS 1003 (or concurrent) or PHYS 2703; CHEM 3511 is prerequisite to CHEM 3512; CHEM 3512 is prerequisite to CHEM 3513.*

CHEM 3513 - Physical Chemistry Lecture

Units: 3

Fundamental physical laws, theoretical principles and mathematical relations of chemistry. *Prerequisites: CHEM 2200, MATH 2304 and PHYS 1003 (or concurrent) or PHYS 2703; CHEM 3511 is prerequisite to CHEM 3512; CHEM 3512 is prerequisite to CHEM 3513.*

CHEM 3531 - Physical Chemistry Laboratory

Units: 2

Experience in the measurement of physicochemical properties, digital computer analysis of experimental data, and report writing. *Prerequisites: CS 1020 or CS 1160 (or concurrent enrollment); CHEM 3511 (or concurrent enrollment); CHEM 3531 is prerequisite to CHEM 3532.* Six hrs. lab. each.

CHEM 3532 - Physical Chemistry Laboratory

Units: 2

Experience in the measurement of physicochemical properties, digital computer analysis of experimental data, and report writing. *Prerequisites: CS 1020 or CS 1160 (or concurrent enrollment); CHEM 3511 (or concurrent enrollment); CHEM 3531 is prerequisite to CHEM 3532.* Six hrs. lab. each.

CHEM 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least a 2.0 GPA; departmental approval of activity; completion of CHEM 2200. No units may be counted toward the Chemistry major or minor. CR/NC grading only.*

CHEM 4161 - Advanced Inorganic Chemistry

Units: 3

The bonding, structure and reactivity of inorganic compounds. *Prerequisites: Prerequisites for CHEM 4161: CHEM 3303.*

CHEM 4162 - Advanced Inorganic Chemistry

Units: 3

The bonding, structure and reactivity of inorganic compounds. CHEM 4162 emphasizes the structure and chemistry of coordination compounds and complex ions, including the application of group theory to spectral analysis. *Prerequisites: Prerequisites for CHEM 4162: CHEM 4161.*

CHEM 4180 - Inorganic Chemistry Laboratory

Units: 2

Laboratory experience in the preparation and characterization of selected inorganic compounds. *Prerequisites: CHEM 4162.* Six hrs. lab.

CHEM 4240 - Instrumental Methods of Analysis

Units: 4

Principles of operation and application of instrumental methods including visible/ultraviolet and infrared spectrophotometry, atomic emission and absorption, nuclear magnetic resonance and mass spectrometry, gas-liquid and high-performance liquid chromatography, electrochemistry, and data acquisition and instrument control using microcomputers. *Prerequisites: CHEM 2302 or CHEM 3303; CHEM 3501 or CHEM 3511.* Two hrs. lect., 6 hrs. lab.

CHEM 4311 - Advanced Organic Chemistry

Units: 4

Mechanistic approaches to synthetic studies; chemistry of carbonyl compounds; chemistry of heterocyclic and polycyclic compounds with emphasis on those of natural origin or biological interest. *Prerequisites: CHEM 3303.*

CHEM 4400 - Instructional Activities in Chemistry

Units: 2

Theory and practice of teaching chemistry concepts using modern pedagogical techniques most relevant to chemistry; guided field experiences as assistants in local high school classrooms, tutoring CSUEB students, and leading group problem-solving sessions. *Prerequisites: CHEM 3303. CR/NC grading only.* One hr. lect., 2 hrs. act.

CHEM 4411 - General Biochemistry

Units: 4

A detailed description of the major classes of biological molecules such as amino acids, proteins, enzymes, carbohydrates, lipids, nucleotides, nucleic acids, and specialized molecules such as hormones and coenzymes. The metabolism of these molecules will be covered in detail. *Prerequisites: CHEM 3303. CHEM 4411 is prerequisite to CHEM 4412; CHEM 4412 is prerequisite to CHEM 4413.*

CHEM 4412 - General Biochemistry

Units: 4

A detailed description of the major classes of biological molecules such as amino acids, proteins, enzymes, carbohydrates, lipids,

nucleotides, nucleic acids, and specialized molecules such as hormones and coenzymes. The metabolism of these molecules will be covered in detail. *Prerequisites: CHEM 3303. CHEM 4411 is prerequisite to CHEM 4412; CHEM 4412 is prerequisite to CHEM 4413.*

CHEM 4413 - General Biochemistry

Units: 4

A detailed description of the major classes of biological molecules such as amino acids, proteins, enzymes, carbohydrates, lipids, nucleotides, nucleic acids, and specialized molecules such as hormones and coenzymes. The metabolism of these molecules will be covered in detail. *Prerequisites: CHEM 3303. CHEM 4411 is prerequisite to CHEM 4412; CHEM 4412 is prerequisite to CHEM 4413.*

CHEM 4430 - General Biochemistry Laboratory

Units: 4

Laboratory techniques in biochemistry. Intended to supplement General Biochemistry, CHEM 4411 and CHEM 4412. *Prerequisite or Co-requisite: CHEM 4411.* Two hrs. lect., 6 hrs. lab.

CHEM 4431 - Advanced Biochemistry Laboratory

Units: 2

Advanced laboratory techniques in biochemistry. The focus is on biochemical procedures not covered in CHEM 4430 (advanced electrophoresis techniques, advanced protein characterization and emphasis on the analysis of nucleic acids). *Prerequisites: CHEM 4413 (or concurrent), and CHEM 4430.* Six hrs. lab.

CHEM 4440 - Protein Structure

Units: 3

The basic structural motifs found in proteins such as enzymes, antibodies, membrane-bound proteins, virus-coat proteins, and nucleic acid binding proteins. Discussion will also focus on the biological significance of these structures. *Prerequisite or Co-requisite: CHEM 4411.*

CHEM 4450 - Nucleic Acid Chemistry

Units: 3

Nucleic acid structure, modification, and processing. Oligonucleotide synthesis, methods essential to the chemical characterization of nucleic acids, and virus structure and replication. *Prerequisite or Co-requisite: CHEM 4412.*

CHEM 4460 - Major Organ Biochemistry

Units: 3

The unique biochemistry of the major organs of the human body including brain, heart, liver, kidney, skeletal muscle, adipose tissue, endocrine glands, and reproductive organs. The metabolism unique to a particular organ system and to inter-relationships with the other organs of the body. *Prerequisite or Co-requisite: CHEM 4412.*

CHEM 4521 - Elements of Chemical Thermodynamics

Units: 4

Selected topics in classical and statistical thermodynamics, with emphasis on thermochemical calculations. *Prerequisites: CHEM 3513.*

CHEM 4601 - Environmental Chemistry I

Units: 4

A study of the environmental aspects of chemistry: aqueous multiple equilibria, pH effects of solubility, carbon dioxide systems, inorganic pollutants in water and soils. *Prerequisites: CHEM 1103.* 3 hours. Lecture/ 3 hours Lab.

CHEM 4602 - Environmental Chemistry II

Units: 4

Additional environmental aspects of chemistry: organic pollutants in the environment, photochemical smog, hazardous waste treatment, toxicology, environmental chemical analysis. *Prerequisites: CHEM 4601 or instructor consent.* 3 hours Lecture/ 3 hours Lab.

CHEM 4700 - Survey of Chemical Literature

Units: 2

Systematic introduction to the use of the chemical literature, including the use of physical library resources and online database searching. *Prerequisites: CHEM 3303 or equivalent.*

CHEM 4810 - Undergraduate Research

Units: 2

Independent research under the guidance of a member of the Chemistry Department faculty. Students should consult with faculty members to determine specific research opportunities. *Prerequisites: Consent of instructor.*

CHEM 4811 - Senior Thesis

Units: 2

Independent research under the guidance of a member of the Chemistry and Biochemistry Department faculty. Development and writing of a comprehensive report documenting undergraduate research. *Prerequisites: CHEM 4810 and consent of instructor.*

CHEM 4830 - Seminar in Forensic Research

Units: 1

Seminar on chemical aspects of forensic research. Current issues in forensic science based on chemical concerns.

CHEM 4900 - Independent Study

Units: 1-4

Chemistry: Courses for Non-Science Majors

CHEM 1000 - Popular Topics in Chemistry

Units: 4

Nonmathematical discussions of subjects as: energy in the universe and the cell, evolution, nutrition, chemical senses, drugs, hormones, synthetics, and pollution. Designed as a general education course for non-science majors. Not open to students with credit for CHEM 2001.

CHEM 1100 - Introduction to College Chemistry

Units: 5

Elementary principles of chemistry: measurement, properties of matter, chemical symbols and formulas, chemical equations, stoichiometry, atomic structure, gas laws, solutions. *Prerequisites:* Satisfaction of the ELM exam requirement. Three hrs. lect., 6 hrs. lab., disc.

CHEM 1110 - Fundamentals of College Chemistry

Units: 5

Elementary principles of chemistry: measurement, properties of matter, chemical symbols and formulas, chemical equations, stoichiometry, atomic structure, and solutions. Real world applications and connections to other science disciplines.

Prerequisites: Satisfaction of the ELM requirement. Not open to students with credit in CHEM 1100. Lecture/Lab. *Satisfies GE Area: B3.*

CHEM 1605 - Basic Chemistry for Healthier Living

Units: 4

A chemical perspective for healthier living. Basic inorganic chemistry: an introduction to atomic and molecular structure.

Prerequisites: A score of 42 or above on the Entry Level Math Test or a college level math score on the SAT, ACT or AP exam or the equivalent. Not open to students with credit for CHEM 1601. A-F grading only. Three hrs. lect., 3 hrs. lab.

CHEM 1620 - Basic Biochemistry for the Health Sciences

Units: 4

Introduction to basic biochemistry with emphasis on the structure, function, and metabolism of proteins, carbohydrates, and lipids as they relate to human health. *Prerequisites:* CHEM 1610, or CHEM 1615. Not for Chemistry or Biochemistry major credit.

CHEM 3010 - The Making of Wine

Units: 4

The history, chemistry and technology of wine making. Production of standard types of wine from grape varieties. Laboratory illustrates chemical principles as applied to wine making. Not an elective for the chemistry major. Three hrs. lect., 3 hrs. lab.

CHEM 3011 - Foundational Chemistry

Units: 4

Focus on the California State Science Standards and is designed to prepare pre-service and in-service teachers for the CSET General Science Subtest in Chemistry with the goal of obtaining a Foundational Science Credential. CHEM 1100 strongly recommended. *Prerequisites:* High school chemistry, or equivalent; satisfaction of the ELM. Not open to either Chemistry or Biochemistry majors.

CHEM 3012 - Foundational Chemistry Laboratory

Units: 1

This laboratory course supplements CHEM 3011. Designed to prepare pre-service and in-service teachers for the CSET General Science Subtest in Chemistry with the goal of obtaining a Foundational Science Credential. *Prerequisites:* CHEM 1100.

Prerequisite or Co-requisite: CHEM 3011. Not open to either Chemistry or Biochemistry majors. (Three hrs. lab)

CHEM 3999 - Issues in Chemistry

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in chemistry.

Chemistry: Graduate

CHEM 6310 - Advanced Topics in Organic Chemistry

Units: 3

Selected topics in special advanced fields of organic chemistry. Topics vary each quarter. May be repeated two times for credit when content varies, for a maximum of 9 units.

CHEM 6410 - Advanced Topics in Biochemistry

Units: 3

Selected topics in biochemistry, e.g., advanced discussion of proteins, enzyme kinetics, physical biochemical techniques, nucleic acid chemistry. May be repeated once for credit when content varies, for a maximum of 6 units.

CHEM 6430 - Protein Chemistry Techniques

Units: 4

Techniques in protein chemistry. Methods for protein quantification, separation, identification, purification and sequence analysis. Emphasis on modern procedures employing techniques such as chromatography, electrophoresis, isoelectric focusing, gene splicing and immunological probing.

CHEM 6510 - Advanced Topics in Physical Chemistry

Units: 3

Selected topics in physical chemistry, e.g., molecular structure, spectroscopy, quantum mechanics, and crystallography. May be repeated for credit, for a maximum of 9 units.

CHEM 6521 - The Chemical Bond

Units: 3

The quantum mechanical description of the structure and spectroscopic properties of atoms and molecules, of the chemical bonding in molecules, and of bonding in solids and liquids.

CHEM 6820 - Seminar

Units: 1

Seminar based on oral presentations, given by the students enrolled, of current chemical literature or reports of research in progress. Effective communication and presentation skills will be emphasized. May be repeated two times for credit, for a maximum of 3 units. *A-F grading only*

CHEM 6830 - Research

Units: 1-5

Original research in chemistry, under the supervision of a member of the graduate faculty. May be repeated for credit, for a maximum of 9 units.

CHEM 6850 - Methods of Graduate Research

Units: 3

An introduction to advanced research methods including bibliographical, instrumental, and laboratory applications.

CHEM 6898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for credit, for a maximum of 8 units. No units may be counted toward the Chemistry major. *CR/NC grading only.*

CHEM 6900 - Independent Study

Units: 1-3

A maximum of four units may be applied toward the degree.

CHEM 6901 - Comprehensive Review

Units: 2

Preparation for Comprehensive Examination including review of relevant areas and preparation of a substantial written report on a selected topic under the direction of a faculty advisor. The final examination covers the selected topic and is the oral portion of the Comprehensive Examination. *CR/NC grading only.*

CHEM 6910 - University Thesis

Units: 1-3

Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense is normally required. (See also, "University Thesis Writing Guide," www.csueastbay.edu/thesiswritingguide.)

CHEM 6999 - Issues in Chemistry

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in chemistry. May be repeated for credit when content varies, for a maximum of 8 units.

Communication

COMM 1000 - Public Speaking

Units: 4

Theory, practice, and evaluation of oral communication. Emphasis on ethical responsibility, careful selection and development of ideas, and logical organization of expository/argumentative/ persuasive discourse.

COMM 1004 - Interpersonal Communication

Units: 4

Study of principles of oral communication in different interpersonal contexts; dyads, interviews, and exercises in listening and speaking intended to develop competence in oral communication.

COMM 2200 - Introduction to Journalistic Writing

Units: 4

Fundamental theory and practice of newswriting across a wide range of platforms, including print and digital formats. Three hrs. lect., 2 hrs. act.

COMM 2201 - Argumentation and Debate

Units: 4

Applied informal logic and reasoned discourse using forensic debate as a format for propositional arguments of fact, value and policy. Careful thinking across personal, professional, and public contexts. *Prerequisites: COMM 1000 or permission of instructor.*

COMM 2250 - Sports and Media

Units: 4

The relationship between mass media and sports in America. Sports content in the major print and broadcast media, notable careers in sports media, and relevant social scientific research.

COMM 2300 - 21st Century Communication

Units: 4

Introduction to communication studies survey course covering key ideas, readings, and areas of concern. Historical and contemporary perspectives on communication will be examined.

COMM 2320 - Communication Writing and Design

Units: 4

Writing critically, clearly, and accurately across academic and professional communication contexts. Includes emphasis on written style, syntax, punctuation, source citation, and principles of visual design. Three hrs. lect., 2 hrs. act.

COMM 2600 - Documentary Film Studies

Units: 4

Screening and discussion of documentary filmmaking and the social impact of the documentary film as a craft and visual art form. History of documentary filmmaking. *A-F grading only.*

COMM 3000 - History and Criticism Communication

Units: 4

Overview of history of communication and media emphasizing origins and significant developments through the ages. Critical study of media exploring its effects, roles and dramatic changes brought on by technology and synergy, and impact of globalization on field in recent years.

COMM 3002 - Communication, Media and Culture

Units: 4

Exploration of culture as the expression of human agency, hinging on a reciprocal relationship between communication and culture covering embodied, symbolic, material, oral, visual, social, and ideological aspects of cultural studies. Investigates the relationship of technology with communication and culture.

COMM 3003 - Philosophy and Theory of Communication

Units: 4

Philosophical and theoretical approaches to communication. Comparisons of contemporary theoretical paradigms guiding current research. Research examples within theoretical traditions. Interrelationships between theory and practice.

COMM 3004 - Quantitative Communication Research Methods

Units: 4

Study of communication from the perspective of message production and effects. Fieldwork and experimental methodologies for developing, writing, understanding and presentation of descriptive and inferential statistics in communication research.

COMM 3005 - Qualitative Communication Research Methods

Units: 4

Surveys various methods of qualitative audience research, measures, analysis, and theoretical definitions of "audience". Students become versed in the advantages and disadvantages of qualitative approaches and conduct primary qualitative research and analysis.

COMM 3010 - Intermediate News Writing and Editing

Units: 4

Basic principles of editing applied to more advanced newswriting. Developing information from various sources: public records, interviews, speeches, and meetings. Story structure and flow and current events examination. *Prerequisites: COMM 2200.* Three hrs. lect., 2 hrs. act.

COMM 3100 - Introduction to Professional Video Production

Units: 4

Principles of producing and directing non-dramatic program materials for visual platforms, including online television and other popular digital formats. Theory, application, and practice to include equipment, studio operations and program formats. Two hrs. lect., 4 hrs. act.

COMM 3107 - Introduction to Organizational Communication

Units: 4

Analysis and application of theory and principles of human communication in private and public organizational settings. Historical survey of metaphors and their influence on organizational practices.

COMM 3160 - Radio Operations

Units: 4

Radio production techniques and station operations. Emphasis on audio production, advertising/sales, copywriting, and station management. Two hrs. lect., 4 hrs. act.

COMM 3200 - Introduction to Research Methods in Communication

Units: 4

Theories and methods of conducting research in communication. Basic assumptions that motivate research and differentiate research approaches. Quantitative, qualitative, and public-records research. Issues of basic research design, and data analysis.

COMM 3204 - Reason in Controversy

Units: 4

Theories of reasoned discourse from Aristotle through contemporary race, gender and argumentation scholarship. Emphasis on argument models, reasoning and fallacies, and criticism of argument in public and professional settings.

COMM 3220 - Media Workshop: Print

Units: 2

Lab experience in the preparation of materials for print media, particularly university student publications such as the Pioneer newspaper. *Prerequisites: COMM 2200, COMM 3000, COMM 3010* Six hrs. act.

COMM 3221 - Media Workshop: Magazine and Feature Writing

Units: 2

A laboratory experience in publishing for the Internet and the creation of an annual online magazine. *Prerequisites: COMM 2200, COMM 3000, COMM 3010* Six hrs. act.

COMM 3222 - Media Workshop: Editorial and Opinion Writing

Units: 2

A laboratory experience in editorial writing for the Internet, including magazine, newspaper and portal uses. *Prerequisites: COMM 2200, COMM 3000, COMM 3010* Six hrs. act.

COMM 3223 - Media Workshop: Advertising and Public Relations

Units: 2

Lab experience in preparation of an advertising and public relations campaign, partnering with local companies. *Prerequisites: COMM 2200, COMM 3000, COMM 3010* Six hrs. act.

COMM 3224 - Media Workshop: Internet

Units: 2

A supervised laboratory experience in the exploration of story telling and narrative communication with multimedia and interactivity; development of new media skills; preparation of materials for online media, progression from linear into non-linear narrative. *Prerequisites: COMM 2200* Six hrs. act.

COMM 3225 - Media Workshop: Photojournalism

Units: 2

A laboratory experience to prepare students for participation in the job market as professional photographers. Students produce individual portfolios, and serve as photographers for print and online editions of The Pioneer newspaper. *Prerequisites: Camera proficiency and familiarity with electronic methods of editing and printing photographs. A-F grading only.* Six hrs. act.

COMM 3231 - Media Workshop: Radio

Units: 2

A supervised laboratory experience in the preparation of materials for radio, particularly university productions. Maximum number in any workshop: six (6). *Prerequisites: COMM 3160 or consent of instructor.* Six hrs. minimum per week.

COMM 3232 - Media Workshop: Video/Documentary

Units: 2

A laboratory experience in video and documentary production. *Prerequisites: COMM 3100.* May be repeated three times for credit for a maximum of 8 units toward graduation; only one enrollment (2 units) may be counted toward the Communication, M.A. Six hrs. act.

COMM 3235 - Journalism Practicum

Units: 1-3

Students acquire hands-on newspaper experience by working five to fifteen hours per week for The Pioneer under the direction of the faculty advisor to The Pioneer. Positions include editors, reporters, photographers, production assistants and account executives. *Prerequisites: COMM 2200, COMM 3010; permission of Pioneer Advisor. Repeatable for a maximum of 6 units.* Three to nine hrs. act.

COMM 3340 - Graphic Communication

Units: 4

A survey of the concepts and methods of non-verbal communication with an emphasis on computer-oriented media. Provides an introduction for desktop publishing which includes design, layout, and graphic production for electronic and print media publication.

COMM 3510 - Small Group Communication

Units: 4

Principles and methods of public and group discussion in problem solving and learning situations. Development of individual skills in discussion preparation, participation, and leadership through practical application. Small group dynamics.

COMM 3530 - Interviewing Principles and Practices

Units: 4

Combining communication theory and practice, students acquire skills in planning, managing, and interpreting various types of interviews. Skills acquired include how to conduct, respond to and analyze survey interviews, persuasive interviews, informational interviews, employment interviews, and counseling interviews.

COMM 3560 - Persuasion Theory and Practice

Units: 4

Models of analyzing media designed to reinforce and/or shift attitudes, motivate action and gain compliance. Application through oral, written, and media-driven formats.

COMM 3600 - Digital Photography II

Units: 4

(See ART 3600 for course description.)

COMM 3630 - Digital Photography III

Units: 4

(See ART 3630 for course description.)

COMM 3660 - Portrait Photography

Units: 4

(See ART 3660 for course description.)

COMM 3670 - Introduction to Studio Lighting

Units: 4

(See ART 3670 for course description.)

COMM 3671 - Advanced Studio Lighting

Units: 4

(See ART 3671 for course description.)

COMM 3680 - Photography Career Preparation

Units: 2

(See ART 3680 for course description.)

COMM 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least 2.0 GPA; departmental approval of activity. CR/NC grading only.*

COMM 3999 - Issues in Communication

Units: 4

COMM 4005 - Histories of Film

Units: 4

(See ART 4005 for course description.)

COMM 4006 - Intermediate Video Production

Units: 4

Pre-production of creative video and digital projects intended for broadcast of the CSUEB Internet portal. Determining target audience, writing proposals, audio-visual shooting/edit plan, budgeting, scheduling. *Prerequisites: COMM 3100.* Two hrs. lect., 4 hrs. act.

COMM 4107 - Relational Communication in Organizations

Units: 4

Personal, public and professional relationships in organizational life. From family communication to entering and departing work situations, superior-subordinate relations, evaluating performance, harassment, and conflict. Organizational pathologies and healthy communication.

COMM 4150 - Media and Government

Units: 4

Interactions between the media and government. Reading on and discussion of current issues, including political elite uses of the media; reporter-official relationships; studies in power manipulation, co-optation and conflict.

COMM 4200 - Radio Programming and Promotion

Units: 4

Theory and practice of radio programming and promotion, including audience and music research, music rotations, news and public affairs programming, on- and off-air promotions, bartering, broadcast formatics, working with clients, record companies.

Prerequisites: COMM 3160 or consent of instructor. Two hrs. lect., 4 hrs. act.

COMM 4201 - Comparative Traditions of Rhetoric

Units: 4

A study of Greek, Roman, and non-European traditions of rhetoric and oratory with an emphasis on theories of discourse, rhetorical practices, and the influence of particular cultures on rhetorical theory and practice.

COMM 4205 - Ethics and Law in Communication

Units: 4

Ethical issues in communication. Includes principles and practices in contexts of public, interpersonal, organizational, mediated, and cross-cultural communication. Case studies of current laws and regulations relating to freedom of speech; defamation; contempt; invasion of privacy; obscenity; copyright and related issues.

COMM 4207 - Organizational Transformation

Units: 4

Addresses theory of interactions between communication practice and culture in public and private communication situations. Analysis of organizational communication from perspective of theory, communication, and culture to foster and inhibit organizational change.

COMM 4300 - Intercultural & International Communication

Units: 4

Socio-political/cultural analysis of communication and the role of media with attention to relationships between and among cultural and racial groups within the US and other nations. Includes analyzing bias and stereotypes.

COMM 4500 - Gender Identity and Representation in Media

Units: 4

Study of gender in media, including both gendered images in media content and an examination of impacts of gender and identity

in the media industries. Reading and discussion, including content analysis of contemporary and historical gendered media portrayals.

COMM 4510 - Public Relations Theory and Practice

Units: 4

Principles of public relations as applied to the creation and production of messages for institutions and industry. Analysis of moving public opinion. Analysis of their "publics" including investigation of the psychological, sociological, economic, political and ethical foundations. *Prerequisites: COMM 2300.*

COMM 4515 - Critical Discourse in Multicultural America

Units: 4

Study of ancient and modern theories of rhetorical criticism. Extensive practice in applying principles of criticism to public communication in the diverse and multicultural American society. Emphasis on development of competence in analysis and refinement of judgment.

COMM 4520 - Advertising Form and Function

Units: 4

Principles of advertising applied to the creation and production of advertising messages in their many forms including the investigation of the psychological, sociological, economic, and legal aspects.

COMM 4530 - The Advertising/Public Relations Campaign

Units: 4

Current issues in advertising and public relations. Term project applying advertising or public relations principles to research, creation and production of all aspects of an actual campaign. *Prerequisites: COMM 2200, COMM 3200 or consent of instructor.*

COMM 4540 - Selected Topics in Mass Communication and Public Policy

Units: 4

Subjects selected from such areas as: law, ethics, regulation, legislation and access to information. Content may vary and will be announced before registration. *Prerequisites: Senior Standing.*

COMM 4600 - Image and Idea

Units: 4

(See ART 4600 for course description.)

COMM 4610 - Rhetoric of Popular Culture

Units: 4

Critical analysis of how popular culture (including clothing, sports events, television, rock concerts, ethnic festivals, advertisements, shopping malls, etc.) works rhetorically as messages and how it works discursively in our interactions with self and others. Students conduct field projects.

COMM 4620 - History of Photography

Units: 4

A general survey of the history of photography. The technical development and the social, aesthetic and commercial impact of the medium. Cross-listed ART 4620.

COMM 4750 - Mass Communication Research

Units: 4

Applied research practices for journalists, public relations and advertising practitioners, and communication researchers. Traditional and innovative methods of gathering information: library research, interviewing, interpretation of public opinion polls, interpreting research literature. Computer database searches and analysis of data. *Prerequisites: COMM 3200.* Not open to students with credit for COMM 3800.

COMM 4880 - Conflict Management

Units: 4

Theory and application of communication methods for managing expressed disagreements in personal, professional, and public communication spheres.

COMM 4885 - Senior Project: Professional, Public and Organizational Communication

Units: 4

Creation of a comprehensive project that synthesizes learning in the Professional, Public and Organizational Communication option involving an integrated communication plan or a Public Relations/Advertising campaign completed in conjunction with a local company. To be taken as late in the student's senior year as possible as determined by its availability.

COMM 4890 - Senior Project: Media Production

Units: 4

Creation of a comprehensive project that synthesizes learning in the Media Production option involving visual/new media, e.g. documentary, feature or investigative report. To be taken as late in the student's senior year as possible as determined by its availability.

COMM 4900 - Independent Study

Units: 1-4

Communication: Graduate

At times the subject matter in a course changes significantly and may be taken more than once for credit, with permission of the instructor and the student's advisor. This is indicated in the description of the course.

COMM 5900 - Independent Study

Units: 1-4

May be applied to the M.A. degree with approval. May be repeated for credit, for a maximum of 8 units.

COMM 6000 - Introduction to Graduate Study

Units: 4

Develop attitude and skills of scholarly writing; engage questions about approaching and justifying research, conduct literature reviews, practice scholarly writing of research proposals, conduct advanced library research, and consider the place of ethics in research.

COMM 6010 - Seminar in Theories in Communication

Units: 4

Theories of communication across the discipline of communication, interactions among theories, development of theories of communication, and the relationship of theory to criticism and practice.

COMM 6020 - Seminar in Communication, Media, and Society

Units: 4

An overview of media studies in a field of inquiry, including an evolutionary historical perspective culminating in the present state of the field. Emphasis is given to the levels of the inquiry and content, medium and social interactions around the medium. Context range from personal/local through international/global.

COMM 6030 - Capstone Seminar: Rhetoric, Communication, and Media

Units: 4

Integrate study of media and modes of communication within public and professional spheres of communication, engaging tensions among theory, criticism, research, practice, service, and ethics; across research in rhetoric, communication, and media.

COMM 6040 - Advanced Qualitative Research Methods

Qualitative approaches to communication research, emphasizing applied research skills. Cover major traditions and concepts in qualitative research and recent advances in quantitative inquiry into contemporary electronic media and/or communications issues. *Prerequisite or Co-requisite: COMM 6000.*

COMM 6050 - Advanced Quantitative Research Methods

Quantitative approach to communication research, emphasizing applied research skills. Cover major traditions and concepts in quantitative research and recent advances in quantitative inquiry into contemporary electronic media and/or communications issues. *Prerequisite or Co-requisite: COMM 6000.*

COMM 6100 - Topics in Speech Communication

Units: 4

Presentation of selected topics in speech communication beyond regular course offerings. Subjects will vary and will be specified at time of offering. May be repeated for credit when content varies for a maximum of 8 units.

COMM 6200 - Internship in Speech Communication

Units: 1-4

Supervised experience in a variety of communication activities inside and outside the University. May be repeated for credit, for a maximum of 4 units in the M.A.; for a maximum of 6 units (combined with units from Co-Op Ed.) in the B.A. *CR/NC grading only.*

COMM 6250 - Teaching Communication

Units: 4

The theories of learning and motivations to learn. Development of strategies to communicate course content to encourage learning for the diversity of students in the communication classroom.

COMM 6300 - Seminar in Media Studies

Units: 4

Examines the historical, philosophical, technological, economic, political, and sociological dimensions of media studies as a field of inquiry, emphasizing current concerns in effects and critical research. *Prerequisite or Co-requisite: COMM 6000, COMM 6020, may be taken concurrently.*

COMM 6400 - Seminar in Rhetorical Studies

Units: 4

Selected topics from the philosophy and theory of rhetoric and public address, with original investigations by the student in areas of particular interest; special attention to the literature relating to selected topics. May be repeated once for credit.

COMM 6450 - Seminar in Globalization and Media

Units: 4

Perspectives examining globalization of media and the special role media plays in globalization. Draws from political economy (authors such as David Held and Manuel Castells) and critical media studies.

COMM 6550 - Seminar in Critical Cultural Studies

Units: 4

Overview of cultural studies as a field of inquiry from a critical perspective. Major works studied may include the Frankfurt School, Raymond Williams, Stuart Hall, Paula Treichler, Homi Bhabha, Arjun Appadurai and contemporary figures in the field.

COMM 6551 - Critical Ethnic Media Studies

Units: 4

Overview of the ethnic media infrastructure and discourse as it relates to the changing face of contemporary media in America. Emphasizes study of community, diaspora, marginality, border-crossings, gender, transgression, queer ethnicity, and critical examinations of oppressions and resistance.

COMM 6600 - Seminar in Organizational Communication

Units: 4

Oral communication in organizational settings including the design, implementation and management of communication systems. Research and theories of organizational communication. May be repeated once for credit, for a maximum of 8 units.

COMM 6700 - Seminar in Communication Campaigns Theory and Research

Units: 4

Theory in relation to research, practice, and criticism of communication campaigns in public and professional settings. Theories of persuasion; media effects, relationships between public relations, advertising, and media; ethics in public relations and advertising. *Prerequisite or Co-requisite: COMM 6000.*

COMM 6800 - Seminar in Interpersonal Communication

Units: 4

Critical examination of research, theory, and methods in interpersonal communication; analysis of verbal and nonverbal message forms affecting the nature of human interaction. May be repeated once for credit, for a maximum of 8 units.

COMM 6850 - Professional Communication

Units: 4

Overview of professional communication principles and practices, covering skills, strategies, techniques, use of media, ethics, and professional communication across and between differing cultural and ethnic contexts.

COMM 6898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for credit, for a maximum of 8 units. Only a maximum of 4 units may be applied to the M.A. in Communication. *CR/NR grading only.*

COMM 6899 - Project

Units: 5

Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense may be required. Maximum of 5 units per student.

COMM 6900 - Independent Study

Units: 1-4

COMM 6901 - Comprehensive Examination Preparation

Preparation for graduate comprehensive examination. Directed readings and review of sample questions. May not be repeated for credit. *CR/NC grading only.*

COMM 6910 - University Thesis

Units: 1-9

Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See also "University Thesis Writing Guide.") Maximum of 9 units per student.

COMM 6999 - Issues in Speech Communication

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in speech communication. May be repeated for credit when content varies, for a maximum of 8 units.

Computer Engineering

CMPE 3010 - Electric Circuit Theory II

Units: 4

Advanced digital topics, transistor behavior, modeling and design, SPICE, and Logic families like CMOS, TTL, ECL, NMOS, DOMINO, etc. *Prerequisites:* ENGR 2010 *Co-requisites:* CS 3430.

CMPE 3430 - Computer Architecture

Units: 4

(See CS 3430 for course description.)

CMPE 3432 - Digital Design Lab

Units: 4

(See CS 3432 for course description.)

CMPE 3434 - Microprocessor Lab

Units: 4

(See CS 3434 for course description.)

CMPE 3752 - Introduction to Digital Signal Processing

Units: 4

(See CS 3752 for course description.)

CMPE 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus activities.

Prerequisites: At least a 2.5 GPA, junior or senior standing, departmental approval of activity. A maximum of 4 units will be accepted toward the Engineering major. CR/NC grading only.

CMPE 3999 - Issues in Computer Engineering

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in engineering.

CMPE 4330 - Advanced Work Measurement

Units: 4

Predetermined time systems. Time formulas. Standard data systems. Use of statistical methods. Standard data systems applied to clerical, manufacturing, and micro assembly. Developing and maintaining computerized systems. Three hrs. lect., 3 hrs. lab.

CMPE 4432 - VLSI Circuit Design

Units: 4

(See CS 4432 for course description.)

CMPE 4435 - Computer Architecture II

Units: 4

(See CS 4435 for course description.)

CMPE 4610 - Senior Design I

Units: 3

Development of technical writing and presentation skills through class discussions, proposal writing and presentations. Development of team skills through identification and development of team project proposal and through team building exercises. Utilization of engineering design process and project management techniques in proposal development. Introduction of engineering ethics through case studies. *Prerequisites: for Engineering Department: Senior standing and departmental approval. Prerequisite or Co-requisite: for Industrial Engineering Option: any three of INDE 4100, INDE 4200, INDE 4300, INDE 4430. For Computer Engineering Option: CS 4435/CMPE 4435 and CS 4560.*

CMPE 4620 - Senior Design II

Units: 3

Utilization of industrial engineering skills and engineering design concepts including development of alternative solutions and economic analysis of alternatives to complete an industrial project. *Prerequisites: CMPE 4610.*

CMPE 4835 - Human-Computer Interaction

Units: 4

(See CS 4835 for course description.)

CMPE 4845 - Fuzzy Sets and Fuzzy Logic

Units: 4

(See CS 4845 for course description.)

CMPE 4900 - Independent Study

Units: 1-4

Computer Science

CS 1020 - Introduction to Computers

Units: 4

Computers, their use and place in modern society. Computer organization and hardware, computer software. Introduction to use of the computer, operating system commands, word processing, database management, other applications, and computer programming. Internet and its use. Ethical and societal issues. No prior computer experience necessary; course recommended for students of any major who want to learn about computers and how to use them. *Prerequisites: Satisfaction of the Entry Level Mathematics (ELM) requirement.* Not open to students with credit for CIS 1270.

CS 1080 - Introduction to Media Computation

Units: 4

Introduction to computer programming through manipulation of digital media such as images and sound. Topics include: control

structures, arrays, functions, and use of libraries. Intended for non-majors. *Prerequisites: Satisfaction of the Entry Level Mathematics (ELM) requirement.*

CS 1160 - Introduction to Computer Science I

Units: 4

An introduction to computers and computer science, problem solving, algorithms, and program design. Use of Interactive Development Environment (IDE's). Programming in C++. Topics include input and output, text files, control structures, functions, arrays. Students with no computer experience are encouraged to take CS 1020 as preparation for this course.

Prerequisites: MATH 1300 or equivalent.

CS 2020 - Introduction to Web Design and Technology

Units: 4

Technology and design of web sites, systems and services. Human factors issues, computer-human interfaces design, web system design and development and testing; evaluation processes. Website development using multimedia, graphics, image, and animation tools. Topics from e-commerce solutions and networking fundamentals. *Prerequisites: Satisfactory completion of ELM.* Not open to students with credit for CS 3520. Not for credit in computer science major.

CS 2360 - Introduction to Computer Science II

Units: 4

Continuation of CS 1160. Focuses on algorithm development, structured program design, testing, and debugging. Topics include abstract data types, pointers, linked lists, recursion. Introduction to classes. *Prerequisites: CS 1160.*

CS 2370 - Introduction to Computer Science III

Units: 4

Continuation of CS 2360. Further development of programming and problem solving skills in Computer Science. Topics include elementary data structures (stacks and queues), object oriented design, and more on searching, sorting and other algorithms.

Prerequisites: CS 2360.

CS 2430 - Computer Organization and Assembly Language Programming

Units: 4

Functional organization of digital computers and programming in machine and assembly language. Internal representation of data, binary arithmetic, machine instructions, addressing modes, subroutine linkage, macros. Introduction to assemblers, linkers, and loaders. *Prerequisites: An introductory programming course.*

CS 3120 - Programming Language Concepts

Units: 4

Survey and critical comparison of a variety of computer languages. Issues include syntax, semantics, control structures, data representation. Discussion of both design and implementation; of both imperative and declarative languages. *Prerequisites: CS 2360 and CS 2430.*

CS 3240 - Data Structures and Algorithms

Units: 4

Definition, design, implementation of abstract data structures, including hash tables, trees, graphs. Design, implementation, and analysis of algorithms for these data structures. *Prerequisites: MATH 2150, CS 2370, CS 2430.*

CS 3340 - Introduction to Object-Oriented Programming and Design

Units: 4

Programming in an object-oriented language, using object-oriented techniques and concepts. Classes, operator overloading, information hiding, inheritance, and polymorphism. Memory management. Parameterized classes. Exception handling. Object-oriented design of programs. *Prerequisites: CS 3240 and knowledge of C or C++.*

CS 3430 - Computer Architecture

Units: 4

Logical design of digital computers. Boolean algebra, combinational and sequential circuits, computer arithmetic, memories, integrated circuits, control processors, input/output. No electronics experience needed. *Prerequisites: MATH 2150, CS 2430.* Cross-listed CMPE 3430.

CS 3432 - Digital Design Lab

Units: 4

Design assembly and test of combinational and sequential circuits. Digital systems design using computer-aided-design tools and programmable logic devices. *Prerequisites: CS 3430.* Cross-listed CMPE 3432. Two hrs. lect., 6 hrs. lab.

CS 3434 - Microprocessor Lab

Units: 4

Microprocessor organization and operation; hardware/software interaction; memory, serial, and parallel I/O port interfacing; interrupt-handling. *Prerequisites: CS 3430.* Cross-listed CMPE 3434. Three hrs. lect., 3 hrs. lab.

CS 3520 - Web Site Development

Units: 4

Web servers and browsers. HTML, images, audio and video files, indexer, forms, CGI scripts, Java programming, JavaScript. *Prerequisites: CS 3240.*

CS 3560 - Introduction to Systems Programming

Units: 4

Introduction to systems programming in a modern environment. Introduction to fundamental concepts of operating systems; analysis of a particular operating system (organization, interfaces, system calls, files, process control and communication, resource sharing). Shell and C programming. Development tools. *Prerequisites: CS 2360.*

CS 3590 - Data Communications and Networking

Units: 4

Fundamentals of data communications: media, transmission, encoding and processing, interfacing, error detection and handling, link control, multiplexing, circuit and packet switching. Introduction to network architecture and topology: local and wide area networks. *Prerequisites: CS 2370 and CS 3430.*

CS 3750 - Numerical Analysis I

Units: 4

(See MATH 3750 for course description)

CS 3752 - Introduction to Digital Signal Processing

Units: 4

Mathematical modeling of signals and systems. Continuous and discrete signals, with applications to audio, images, video, communications, and control. Frequency domain modeling and frequency response. Sampling of continuous-time signals. A simulation-based laboratory is part of the course. *Prerequisites: MATH 1304, MATH 2101; CS 1160.* Cross-listed CMPE 3752. Three hrs. lect., 3 hrs. lab.

CS 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least 2.0 GPA; departmental approval of activity; completion of lower division Computer Science major requirements, and upper division standing. A maximum of 4 units will be accepted toward the Computer Science major. CR/NC grading only.*

CS 4020 - Computing and Social Responsibility

Units: 4

Social impact and ethical aspects of computing: responsibility of practicing professionals, effects on privacy, security, property rights of individuals and institutions, etc. Topics include system reliability, intellectual property, computer crime, attacks on computer systems, and societal dependence on computers. *Prerequisites: CS 3240, or consent of instructor.*

CS 4110 - Compiler Design

Units: 4

Design and construction of high-level language translators. Formal language theory, parsing algorithms, interpreting, code generation, optimization. Construction of a small compiler. *Prerequisites: CS 3120, CS 3240.*

CS 4170 - Theory of Automata

Units: 4

Formal models of automata, language, and computability and their relationships. Finite automata and regular languages. Pushdown automata and context-free languages. Turing machines, recursive functions, algorithms and decidability. *Prerequisites: MATH 1305, MATH 2101, MATH 2150.*

CS 4245 - Analysis of Algorithms

Units: 4

Design, analysis and implementation of algorithms. Methods of algorithm design, including recursion, divide and conquer, dynamic programming, backtracking. Time and space complexity analyses in the best, worst, and average cases. NP-completeness; computationally hard problems. Applications from several areas of Computer Science. *Prerequisites: MATH 1305, MATH 2101, CS 3240.*

CS 4310 - Software Engineering I

Units: 4

Concepts and issues in the development of large software projects. Systematic approaches to requirements, analysis, design, implementation, testing, and maintenance of high-quality software. *Prerequisites: CS 3240.*

CS 4311 - Software Engineering II

Units: 4

Continuation of Software Engineering I with emphasis on the object-oriented design to implementation stages of the life cycle. Design methodologies including the Unified Modeling Language, illustrated with example design patterns. Implementation in Java. Topics include standards, documentation, instrumentation, testing. *Prerequisites: CS 3340, CS 4310.*

CS 4320 - Software Testing and Quality Assurance

Units: 4

Concepts and issues in the testing and quality control of large software projects. Topics include white box, black box, unit, integration, and validation testing; quality assurance through planning, review, and use of software metrics. *Prerequisites: CS 3240.*

CS 4330 - Building Secure Software

Units: 4

Security and safety analysis in software design and development. Vulnerability detection and avoidance. Topics include authentication, principle of least privilege, buffer overflows, race conditions, time-of-check vs. time-of-use, trust management, access control, and other security relevant issues. *Prerequisites: CS 3240.*

CS 4432 - VLSI Circuit Design

Units: 4

Fundamental design techniques for VLSI (Very Large Scale Integrated) circuits. Theory of implementing complex integrated circuits on a microchip. Use of computer aided design tools. *Prerequisites: CS 3430, CS 3432. Cross-listed CMPE 4432.*

CS 4435 - Computer Architecture II

Units: 4

Advanced computer organization and design. Topics chosen from among RISC architectures, computer arithmetic, pipelining, cache memory and parallel processors. Recommended prerequisite: knowledge of C programming. *Prerequisites: CS 3430. Cross-listed CMPE 4435. Not open to students who have completed CS 4430. (Formerly CS 4430.)*

CS 4521 - Mobile and Topics in Web Programming

Units: 4

Current practices and trends in software design, development, and deployment of mobile and new web applications and systems. Topics include modern mobile device application development, web technologies, social application development, pervasive computing and semantic web. *Prerequisites: CS 3520 or permission of instructor.*

CS 4525 - Principles of Network Security

Units: 4

Computer network security fundamentals. Cryptography (Symmetric key algorithms and Public key algorithms). Authentication

and identification, message integrity techniques. Access control and key management. Wireless security. Discussion of particular protocols, e.g., IPSEC, TLS, PGP, S/MIME, etc. *Prerequisites: CS 3590.*

CS 4526 - Principles of Wireless, Mobile, Grid and Pervasive Computing Security

Units: 4

Comprehensive new topics in Wireless, Mobile, Grid and Pervasive Computing which includes IEEE 802.11 Wireless Security, Security in Mobile Telecom Networks (GPRS, UMTS), security in MANET, VANET, WSN, Bluetooth, VoIP, Grid networks and Mobile Agents. *Prerequisites: CS 4525.*

CS 4527 - Network Security Management

Units: 4

Issues in the management of secure networks, including models, life cycle, threats and ethical considerations. CIA triad, security star and NSA triad, the information security life cycle, security plans, policy, and risk management, with techniques and technologies for security management. Threats to network and wireless security, disaster planning, cyber terrorism and Homeland Security. *Prerequisites: CS 4525, CS 4526.* Not open to Graduate students.

CS 4560 - Operating Systems

Units: 4

Principles of operating system design and implementation. Concurrent processes, interprocess communication, job and process scheduling; deadlock. Issues in memory management (virtual memory, segmentation, paging) and auxiliary storage management (file systems, directory structuring, protection mechanisms). Performance issues. Case studies. *Prerequisites: CS 3240 and CS 3430.*

CS 4590 - Computer Networks

Units: 4

Computer network analysis, design, and implementation. A detailed study of the network, transport and application layers of the TCP/IP model. Specific emphasis on protocols, services, design issues and performance. Programming assignments using TCP/IP. *Prerequisites: CS 3240, CS 3560 and CS 3590.*

CS 4592 - Network Operations and Administration

Units: 4

Network operations, administration, and management. Management Information Base (MIB). Standards including SNMP, CMIP, ASN-1. Network management programming. Network Management of Ethernet and TCP/IP. Survey and applications of existing network management systems. *Prerequisites: CS 3590.*

CS 4593 - Cloud Computing

Units: 4

Cloud computing: its importance, architecture and issues; services and applications by type (IaaS, PaaS, SaaS, IDaaS, CaaS); abstraction and virtualization; capacity planning; exploring platform as a service; cloud security; mobile clouds; application development and case studies. *Prerequisites: CS 4590. A-F grading only.*

CS 4594 - Broadband Networks and Communications

Units: 4

Principles of broadband networks and communications. Telephone system structure, signaling, services, and protocols. Circuit, packet and cell switching. broadband signaling and traffic management. Advanced switch technology. Case studies.

Prerequisites: CS 3590.

CS 4596 - Wireless and Mobile Networking

Units: 4

Network protocols and mechanisms to support mobility, e.g., Mobile-IP, M-RSVP, proxies. Issues including routing, tunneling, security, and handoffs. Wireless communication standards including AMPS, IS-95, GSM, PCS, and satellite standards.

Underlying technologies including multiplexing and coding. *Prerequisites: CS 3590.*

CS 4660 - Database Architecture

Units: 4

Relational, network, and hierarchical data models. Data description and data manipulation languages. Schemas, query processing, database system architecture. Integrity, concurrency, and security techniques. Distributed databases. *Prerequisites: CS 3240.*

CS 4665 - Database Operations and Administration

Units: 4

Topics in the operation and administration of databases, including database creation, account maintenance, data import and export, system backup, and performance tuning. Hands-on experience administering an Oracle database. *Prerequisites: CS 4660.*

CS 4810 - Artificial Intelligence

Units: 4

"Intelligent" computer programs and models of human intelligence. Game playing, robotics, computer vision, understanding natural language, knowledge engineering, computer learning. *Prerequisites: CS 3240.*

CS 4835 - Human-Computer Interaction

Units: 4

Human-centered software development and evaluation, human performance models, accommodating human diversity, principles of good design and good designers, introduction to usability testing. HCI aspects of multimedia systems, information systems, and collaboration and communication. Course work includes programming projects and fieldwork. *Prerequisites: CS 3240 and either CS 3120 or CS 3340; or consent of instructor.* Cross-listed CMPE 4835/PSYC 4835.

CS 4840 - Computer Graphics

Units: 4

Survey of computer graphics hardware, algorithms, techniques, and standards. Software development on color-mapped raster-scan computer graphics system. *Prerequisites: MATH 1305, MATH 2101, and CS 3240, CS 3430.*

CS 4845 - Fuzzy Sets and Fuzzy Logic

Units: 4

Fuzzy set theory, fuzzy logic, approximate reasoning and relations between fuzzy set theory, probability theory, belief theory, and possibility theory. Fuzzy aggregation operators, fuzzy relations, and fuzzy clustering. Class project options: decision making,

pattern recognition, databases, control, data mining. *Prerequisites: CS 1160, MATH 2150, and course in probability or statistics; or permission of instructor.* Cross-listed CMPE 4845 and MATH 4845.

CS 4848 - Computer Animation Programming

Units: 4

Principles and techniques used to produce software for computer-generated animations. Survey of traditional animation techniques. Issues in 3-D viewing, rendering, and modeling. Motion specification and interpolation. Physically-based and behavioral modeling. *Prerequisites: CS 4840.*

CS 4849 - Game Programming

Units: 4

Survey of technologies for programming computer games. Topics include: mathematics, data structures, graphics (rendering, animation, cinematography), game logic, scripting, networking and server design, audio, artificial intelligence. *Prerequisites: CS 4810 or CS 4840 or equivalent experience, and either CS 3340 or graduate standing.*

CS 4865 - Graphical User Interface Programming Using a Rapid Application Development Tool

Units: 4

Event-driven programming in a windowed Graphical User Interface environment using a Rapid Application Development tool set. Pull-down menus, tool bars and other standard control objects, pointing devices, object hierarchy, standard dialogs, connecting to databases, state table programming. *Prerequisites: CS 3340.*

CS 4900 - Independent Study

Units: 1-5

Computer Science: Graduate

See the graduate Computer Science chapter for Computer Science (CS) course descriptions.

CS 6000 - Research Methodologies

Units: 2

Seminar in recent research in Computer Science. Use of periodical and non-periodical literature for research in computer science. Students read, analyze, present, and discuss papers of current interest in Computer Science. *Prerequisites: "Classified Graduate" standing in Computer Science M.S. degree program and permission of instructor.*

CS 6110 - Theory and Design of Compilers

Units: 4

Grammars and parsing techniques, advanced theory and methods of code generation, code optimization, error recovery, use of compiler-generator tools. *Prerequisites: CS 4110*

CS 6170 - Automata and Formal Languages

Units: 4

Alphabets, strings and languages; Chomsky hierarchy and language classes; regular languages, finite automata, regular expressions and operators; context-free languages, grammars, pushdown automata; context-sensitive languages; Turing machines and decidability. *Prerequisites: MATH 2101, MATH 2150, MATH 2304.*

CS 6260 - Computation and Complexity

Units: 4

Languages and algorithms; decision problems; Turing machines and Turing-Completeness; decidability; measures and classes of time and space complexity (e.g., P, NP, PSPACE); NP-Completeness. *Prerequisites: MATH/ CS 4170 (or CS 6170) and MATH/CS 4245.* Cross-listed MATH 6260.

CS 6310 - Advanced Software Engineering

Units: 4

Advanced concepts of object-oriented and architectural design, along with implementation. Pattern-based design of software using the Unified Modeling Language. Design patterns as re-usable architecture. *Prerequisites: CS 3340*

CS 6320 - Software Engineering of Web-Based Systems

Units: 4

Current practices and trends in software design, development, and deployment of web-based systems, with particular emphasis on e-commerce. Projects include the latest technologies and techniques used by the Internet community. *Prerequisites: CS 3520, CS 3340.*

CS 6325 - Advanced Software Testing

Units: 4

Current practices and tools in software testing. Writing scripts for test automation. Sample topics include: acceptance test-driven development, test data generation, database testing, web testing, test maintenance. *Prerequisites: CS 3240. A-F grading only.*

CS 6330 - Secure Software Development

Units: 4

Security and safety in software design and development. Vulnerability detection and avoidance. Introduction to software analysis tools. Topics include authentication, principle of least privilege, buffer overflows, race conditions, time-of-check vs. time-of-use, trust management, access control, and other security relevant issues. *Prerequisites: CS 3240. A-F grading only.*

CS 6432 - VLSI Systems Design

Units: 4

The use of a highly integrated suite of CAD (Computer Aided Design) tools to design and test a bit-sliced microprocessor that implements concepts from CS 6430. *Prerequisites: CS 4432 or consent of instructor.* Three hrs. lect., 3 hrs. lab.

CS 6520 - Cryptography and Data Security

Units: 4

Cryptographic theory with applications to data and file access security. Substitution ciphers, stream and block cyphers, algebraic codes, error correcting codes, Shannon's theorem. Cryptosystems, including public key. The Data Encryption Standard. Issues of

privacy, authenticity, integrity. Implementation issues, including key management and chaining. *Prerequisites: CS 4560, CS 4170 or 4245, and a course in probability; or permission of instructor.*

CS 6522 - Advanced WWW Software Development

Units: 4

Advanced WWW system architecture and software development. Database access, 2- and 3-tier systems, objects and components, XML, Servlets and JSP, Web Services, Enterprise Java Beans, ASP.NET. Programming exercises. *Prerequisites: : CS 3340 and CS 3520, or permission of instructor.*

CS 6525 - Network Security

Units: 4

Principles of secure network communications. Techniques of authentication and identification, cryptographic key distribution and management, assurances of data integrity. Access control. Security policy; conformance of implementation to policy. Discussion of particular systems, protocols, and utilities, e.g., Kerberos, firewalls, various commercial standards. *Prerequisites: CS 4590.*

CS 6526 - Security in Wireless, Mobile, Grid and Pervasive Computing

Units: 4

Comprehensive new topics in Wireless, Mobile, Grid and Pervasive Computing which includes IEEE 802.11 Wireless Security, Security in Mobile Telecom Networks (GPRS, UMTS), Security in Mobile Ad Hoc Networks (MANETs), Security in Vehicular Ad Hoc Networks (VANETs), Security in Wireless Sensor Networks (WSN), Bluetooth Security, VoIP Security, Grid Security and Mobile Agents Security. *Prerequisites: CS 4525, 6520, 6525.*

CS 6527 - Network Security Management

Units: 4

Issues in the management of secure networks, including models, life cycle, threats and ethical considerations. CIA triad, security star and NSA triad, the information security life cycle, security plans, policy, and risk management, with techniques and technologies for security management. Threats to network and wireless security, disaster planning, cyber terrorism and Homeland Security. Students will complete Network Security Threat analysis project. *Prerequisites: CS 6525, 6526.* Not open to students with credit for CS 4527.

CS 6560 - Operating Systems Design

Units: 4

Theory of operating systems. Process synchronization, concurrency, resource management, security, performance evaluation, analytic models, human interfaces. Implementation issues. *Prerequisites: CS 4560.*

CS 6570 - Distributed Computation

Units: 4

Classical problems which abstract real-world network problems. Process synchronization and communication using message-passing systems. Topics may include mutual exclusion, leader election, global snapshots, Byzantine generals, consensus, shared registers, common knowledge and distributed spanning trees. *Prerequisites: CS 4560*

CS 6575 - Parallel Programming

Units: 4

Course Content: Programming techniques and parallel computing architectures to enhance performance. Data parallelism, thread parallelism, and task parallelism. Memory models, shared memory and message passing. Synchronization, consistency, and interprocessor communication. *Prerequisites:* CS 6560

CS 6580 - Distributed Systems

Units: 4

Issues in the design and implementation of distributed systems. Network layers, architectures, and topologies. Distributed process management, concurrency control, deadlock, and recovery. *Prerequisites:* CS 4560, CS 4590

CS 6591 - Communication Network Analysis and Design

Units: 4

The practice of network analysis and design. Topics include estimation of traffic demand, requirements specification, topology design, network cost analysis, routing, wired and wireless technologies, design tools, fault tolerance, and design of a LAN or WAN. *Prerequisites:* CS 4590

CS 6592 - Network Management

Units: 4

Computer network management concepts, protocols, and industry standards. SNMP, CMIP, and web management. Management applications including fault, performance, configuration, accounting, and security management. Management tools and network modeling. *Prerequisites:* CS 4590

CS 6593 - Cloud Computing

Units: 4

Cloud computing: its importance, architecture and issues; services and applications by type (IaaS, PaaS, SaaS, IDaaS, CaaS); abstraction and virtualization; capacity planning; exploring platform as a service; cloud security; mobile clouds; application development and case studies; graduate project encompassing advanced synthesis and application of cloud computing principles. *Prerequisites:* CS 4590 *A-F grading only.*

CS 6594 - Broadband and Multimedia Networks

Units: 4

Broadband and multimedia network architectures, services, and protocols. Audio, video, and voice coding, quality of service requirements, traffic management, and scheduling in high speed wired and wireless networks. *Prerequisites:* CS 3590 Not open to students with credit for CS 4594. *A-F grading only.*

CS 6596 - Wireless and Mobile Network Architecture

Units: 4

Wireless network architectures including cellular, WLAN, and satellite systems. Signal propagation models and reception techniques. Mobile computing issues including location management, routing, transport, and mobile application design. *Prerequisites:* CS 3590 Not open to students with credit for CS 4596.

CS 6660 - Database Systems

Units: 4

Design issues in current database systems: data models, storage management and access, distributed systems, query languages and query optimization, database integrity and security, encryption and decryption, concurrency control. *Prerequisites:* CS 4560, CS 4660

CS 6665 - Database Systems Administration

Units: 4

Database system architecture and issues in administration. Advanced techniques in database security, object management, performance analysis, SQL tuning, backup and recovery. Hands on experience administering an Oracle database. *Prerequisites:* CS 4660

CS 6715 - Data Compression

Units: 4

Algorithms for data compression, Huffman coding, arithmetic coding, Lev-Zempel coding. Adaptive variations of compression algorithms. Lossless and lossy compression. Transform methods and image compression. Coding theory and information-theoretic bounds. Applications to data transmission. *Prerequisites:* CS 3240, STAT 3401 or STAT 3502

CS 6750 - Topics in Numerical Analysis

Units: 4

(See MATH 6750 for course description.)

CS 6752 - Digital Signal Processing

Units: 4

Linear systems and complex numbers, Fourier and Z transforms, A/D and D/A conversion techniques, Discrete Fourier Transform, Fast Fourier Transform, linear prediction, digital filters, speech processing. *Prerequisites:* CS 3240, MATH 1304, MATH 2101

CS 6810 - Topics in Artificial Intelligence

Units: 4

Knowledge representation and reasoning. Theory and advanced programming techniques. Topics selected from areas of expert systems, natural language processing, image understanding, machine learning, games, and robotics.

CS 6820 - Machine Learning

Units: 4

Advanced topics in Artificial Intelligence, including induction, decision trees, ensemble learning; current-best-hypothesis search, knowledge representation, explanation-based learning, relevance information, inductive logic programming; Bayesian networks, instance-based learning; neural networks and genetic algorithms; reinforcement learning, and adaptive dynamic programming. *Prerequisites:* CS 4810 or CS 6810

CS 6825 - Computer Vision

Units: 4

Mathematical and algorithmic approaches to the problem of computing properties of the 3-D world from one or more digital

images. Imaging, image processing, feature detection, calibration, stereopsis, motion, object recognition, tracking. *Prerequisites:* CS 3240, MATH 2034, MATH 2101

CS 6831 - Statistical Learning and Data Analysis

Units: 4

Introduction to machine learning; emphasis on its underlying mathematics. Topics include: feasibility of learning, data representation, gradient descent, regression, over/under-fitting, regularization, neural networks, SVD, and spectral clustering. *Prerequisites: MATH 2150 and STAT 3401 or STAT 3502. ABC/NC grading only.*

CS 6865 - Topics in Graphical User Interface Programming

Units: 4

Topics from event-driven programming using a windowed Graphical User Interface environment and Rapid Application Development tools. Standard control objects and more. Interaction design issues and human-computer interaction. *Prerequisites:* CS 3340

CS 6870 - Computer Simulation

Units: 4

Introduction to construction and analysis of models by computer simulation. Study of one discrete and one continuous simulation language. Application to modeling biological, industrial, and physical processes. *Prerequisites: MATH 3100, MATH 3331 and a course in computer programming. Cross-listed MATH 6870.*

CS 6899 - Project

Units: 5

Development of an original telecommunications project which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a department committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense required. *Prerequisites: advancement to candidacy.*

CS 6900 - Independent Study

Units: 1-4

CS 6901 - Graduate Synthesis in Computer Science

Units: 4

A synthesis of important areas of Computer Science, culminating in comprehensive examinations covering these areas. *Credit only available to students in the M.S. Computer Science program. Prerequisites: Completion of at least 30 units toward the MS degree; satisfactory completion of all course requirements including CS 6260 and CS 6560, and the analysis/automata requirement. CR/NC grading only.*

CS 6909 - Departmental Thesis

Units: 1-5

Development and writing of a research paper for submission to the department, which specifies its format. Supervision by a departmental committee, at least one of which must be a Cal State East Bay faculty member. *Co-requisites: CS 6000, advancement to candidacy, and approval of thesis proposal by advisor and departmental committee. May be repeated for a maximum of 5 units.*

Construction Management

CMGT 1011 - Introduction to Construction Management

Units: 4

Introduction to construction methods, materials, practices, contracts, codes, laws and trends. Also a study of professional ethics, management techniques and interaction with professional organizations and associations related to construction. *A-F grading only.*

CMGT 2011 - Surveying and Blueprint Reading

Units: 4

Construction surveying site layout techniques are studied. Benchmark, building lines, property lines, leveling and profiling are discussed in lecture with applied laboratory exercises. Broad-based background in interpreting blueprints. Typical plans for both residential and commercial buildings will be reviewed. *Prerequisites: MATH 1130 and MATH 1300. A-F grading only*

CMGT 2060 - Construction Methods and Material I

Units: 4

Introduction to basic construction material. Emphasis is on both light residential and heavy commercial construction including material such as steel, concrete, brick, and wood. Analysis of building methods for structural, non-structural, and design. *Prerequisites: CHEM 1101, CMGT 1011, PHYS 2702. A-F grading only.*

CMGT 2070 - Construction Methods and Material II

Units: 4

Methods in construction of buildings and large structures; site, excavation, foundation, framework, timber, reinforced concrete, structural steel, masonry, excavation, paving, compacting, and others. *Prerequisites: CMGT 2060. A-F grading only.*

CMGT 3101 - Statics

Units: 4

Intermediate introduction to Newtonian mechanics. Analysis of forces and moments on engineering structures in equilibrium. Moments of inertia and stress strain relationships. Strongly Recommended: Strongly Recommended: PHYS 2701. *A-F grading only.*

CMGT 3250 - Electrical and Mechanical Systems in Construction

Units: 4

Introduction to current principles and practices in the application of mechanical and electrical systems. Electrical power system, lighting, wiring, and power distribution. Mechanical systems such as heating ventilating (HV), air conditioning, water supply, drainage, and sewers. *Prerequisites: PHYS 2702. Not open to those with credit for CMGT 4250. A-F grading only.*

CMGT 3280 - Construction Law

Units: 4

Introduction to rules and regulations governing construction industry, including contractors licensing law, state lien laws, health and safety regulations, personnel relations and supervision, worker compensation, employment insurance, taxes, and dispute resolution. *A-F grading only.*

CMGT 3400 - Construction Project Management and Commissioning

Units: 4

Project management concepts for construction; concepts such as roles and responsibilities, labor relations and supervision, administrative systems, computer tools for project management, documentation, quality management, and process improvement. Issues related to commissioning of construction projects. *Prerequisites: ACCT 2251, CMGT 2070. A-F grading only.*

CMGT 3450 - Building Codes

Units: 4

Construction codes: structural, mechanical, electrical, and plumbing. Building safety and accessibility. *Prerequisites: CMGT 2070. A-F grading only.*

CMGT 3600 - Soil Mechanics and Building Foundations

Units: 4

Engineering properties of soils and rocks such as permeability, compressibility and shear strength. Site evaluation for building foundations, dams, tunnels and highways. Slope stability. *Prerequisites: CMGT 3101. A-F grading only.*

CMGT 3898 - Cooperative Education

Units: 1-4

Course Content: Supervised work experience in which student completes academic assignments integrated with off-campus activities. *Prerequisites: At least a 2.5 GPA, junior or senior standing, departmental approval of activity. Only up to 4 units credit may be applied to the Construction Management major. A-F grading only.*

CMGT 3999 - Issues in Engineering

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in construction management. *Prerequisites: Consent of instructor. A-F grading only.*

CMGT 4100 - Engineering Graphics for Construction Management

Units: 4

Engineering graphics fundamentals, drawing and reading construction plans with emphasis on the use of Computer Aided Design (CAD) tools in construction. *Prerequisites: ENGR 1420, MATH 1300. A-F grading only.*

CMGT 4200 - Construction Scheduling

Units: 4

Critical path method, planning, scheduling, and control of construction project including sequencing, time, and control. Use of computer tools for project scheduling. *Prerequisites: CMGT 2070. A-F grading only.*

CMGT 4300 - Environmental Issues and Green Building

Units: 4

Environmental laws and regulations pertaining to construction. Issues such as construction waste disposal and treatment, and green building concepts, LEED permits, scoring and submittal processes for projects. *Prerequisites: CMGT 2070. A-F grading only.*

CMGT 4400 - Construction Cost Estimating

Units: 4

Issues related to construction project cost from the conceptual phase to full implementation. Use of computer aided tools for construction cost estimating. *Prerequisites: ACCT 2251, ECON 2301. A-F grading only.*

CMGT 4500 - Construction Project Planning and Control, Computer Tools

Units: 4

Application of project planning techniques such as CPM and PERT. Project scheduling, forecasting, communications required for project cost and scheduling control. Study of various tools and techniques for construction management information systems. Familiarization with the latest software for construction management. *Prerequisites: CMGT 2070. A-F grading only.*

CMGT 4610 - Senior Project I

Units: 4

Development of technical writing and presentation skills through class discussions, proposal writing and presentations. Development of team skills through team building exercises. Construction management and project management techniques in proposal development. Introduction of professional ethics. *Prerequisites: Senior standing and department approval. A-F grading only.*

CMGT 4620 - Senior Project II

Units: 4

Utilization of construction management skills and design concepts including development of alternative solutions and economic analysis of alternatives to complete a construction management project. *Prerequisites: CMGT 4610. A-F grading only.*

CMGT 4800 - Construction Safety

Units: 4

Explanation of requirements of the Occupational Safety and Health Act and other related federal and state legislation as applied to the building construction industry. Standards for accident prevention, hazard identification, and responsibility for compliance emphasized. Not open to those with credit for CMGT 3190. *A-F grading only.*

CMGT 4900 - Independent Study

Units: 1-4

Course is based on selected research topics agreed on between the student and the faculty supervising the course. *Prerequisites: Completion of 32 credit hours of required courses. A-F grading only.*

CMGT 4990 - Special Topics

Units: 1-4

Group study of a selected topic, the title to be specified in advance. *Prerequisites: Permission of instructor. A-F grading only.*

Construction Management: Graduate

CMGT 6100 - Engineering Graphics for Construction Management

Units: 4

Engineering graphics fundamentals, drawing and reading construction plans with emphasis on the use of Computer Aided Design (CAD) tools in construction. *A-F grading only.*

CMGT 6200 - Legal Issues in Construction Management

Units: 4

Legal issues arising from design and construction services such as claims and dispute resolution, liability, state law pertaining to construction. *A-F grading only.*

CMGT 6300 - Environmental Issues and Green Building

Units: 4

Environmental laws and regulations pertaining to construction. Issues such as construction waste disposal and treatment, and green building concepts, LEED permits, scoring and submittal processes for projects. *A-F grading only.*

CMGT 6400 - Construction Cost Estimating

Units: 4

Issues related to construction project cost from the conceptual phase to full implementation. Use of computer aided tools for construction cost estimating. *A-F grading only.*

CMGT 6500 - Construction Project Planning and Control, Computer Tools

Units: 4

Application of project planning techniques such as CPM and PERT. Project scheduling, forecasting, communications required for project cost and scheduling control. Study of various tools and techniques for construction management information systems. Familiarization with the latest software for construction management. *A-F grading only.*

CMGT 6600 - Financial Decision Making and Reporting in Construction

Units: 4

Introduction to real estate finance. Issues such as mortgage evaluation, cash flow, capital markets, tax laws, and other financial aspects of construction projects are covered. *A-F grading only.*

CMGT 6700 - Construction Risk Management and Commissioning

Units: 4

Techniques for decision making under uncertainty, risk analysis in construction. Issues related to commissioning of construction projects. *A-F grading only.*

CMGT 6800 - Construction Safety

Units: 4

Explanation of requirements of the Occupational Safety and Health Act and other related federal and state legislation as applied to the building construction industry. Standards for accident prevention, hazard identification, and responsibility for compliance emphasized. A Graduate Project will be required. Not open to students with credit for CMGT 4800. *A-F grading only.*

CMGT 6850 - Current Issues in Construction Management

Units: 4

Topics selected that cover current issues in construction management such as construction methods, equipment, and safety issues. May be repeated once for credit for a maximum of 8 units, when content varies. *A-F grading only.*

CMGT 6860 - Utility Systems Construction

Units: 4

Study of the materials, methods, and techniques associated with the construction of major utility systems such as water, sewer, communications, electrical or natural gas. Includes construction of central utility plants, as well as major distribution and collection systems. *A-F grading only.*

CMGT 6870 - Advanced Integrated Computer Applications

Units: 4

Study of management information systems used in the construction industry. Emphasis on the utilization of current state-of-the-art integration of Computer Aided Design (CAD), scheduling (including advanced concepts such as resource leveling, schedule compression, and cash flow projections), and estimating programs. *A-F grading only.*

CMGT 6899 - Project

Units: 1-4

This is a capstone project where the knowledge gained in the curriculum is applied to a real world construction project. *A-F grading only.*

CMGT 6900 - Independent Study

Units: 1-4

Course is based on selected research topics agreed on between the student and the faculty supervising the course. *A-F grading only.*

Criminal Justice Administration

CRJA 2100 - Elementary Criminal Law

Units: 4

The nature and functions of criminal law and the principles and rules underlying its administration. Classification of criminal statutes and crimes. *A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 2200 - Basic Criminal Investigation

Units: 4

The principles and methods of investigation used to acquire and to disseminate information about crimes. *A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 2400 - Evidence in Corrections and Law Enforcement

Units: 4

The role of science and law in the utilization of physical and social evidence in justice administration. *A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 2500 - Administration of Justice

Units: 4

Survey of the various components of the American criminal justice system, emphasizing police, court and corrections administration. An historical, philosophical overview of justice administration. *A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 2600 - Police Community Relations

Units: 4

The relationship between justice administration and the public with particular emphasis on police relations with ethnic and sexual minorities, and juvenile and adult offenders. *A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 3100 - Corrections and Criminal Justice

Units: 4

Legal aspects of juvenile and adult corrections. Investigative techniques in corrections, including probation and parole. Analysis of concepts of rehabilitation, punishment and revenge. *A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 3200 - Research Methods in Criminal Justice

Units: 4

The application of scientific research methods to selected data and statistics in justice administration. Use of scientific methodology in interpreting crime and correctional data. *Prerequisites: STAT 1000 or equivalent.*

CRJA 3300 - Crime Prevention and Control

Units: 4

Concepts of planning and implementation of crime prevention and control systems. The role of security in urban society and civilian involvement in crime prevention. *A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 3350 - Crime and Criminal Justice in the Media and Cinema

Units: 4

Introduction to types of crime and criminal justice through the media and cinema. Examination of the way these media depict due process, victims and offenders, and the criminal justice policy. *A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 3400 - Advanced Criminal Investigation

Units: 4

A continuation of CRJA 2200. The exploration of investigative problems in major crimes. Analysis of role of criminal investigator and the legal use of scientific aids to investigation. Case history, examination and analysis. *Prerequisites: CRJA 2200 or consent of instructor.*

CRJA 3500 - Criminal Identification

Units: 4

Personal identification in criminal and civil investigation. Photography in criminal identification, classification and filing of fingerprints. Handwriting and voice identification. Identification of the unknown dead and skeletal remains. *A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 3610 - Police Organization and Management

Units: 4

Application of principles of organization and management to the study of police agencies and crime investigation; relationship of police agencies to other public agencies. *A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 3700 - Ethics and Justice Administration

Units: 4

The development and application of social theories to the study and analysis of ethical decision-making; studies dealing with problems of integrity through organization, management, and leadership, with emphasis on public agencies, particularly the criminal justice system. *A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 3750 - Family Violence and the Criminal Justice System

Units: 4

Family violence is prevalent in our society, impacting individuals from all socioeconomic levels. This course will introduce students to the types of family violence, potential causes, impact on both individuals and the community, and the criminal justice response. *A-F grading only. A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 3800 - Comparative Evidence and Its Evaluation

Units: 4

Survey of physical evidence found at crime scenes, including their examination methods and interpretation of results. Academic and practical aspects of evidence examination required for understanding the proper use of physical evidence in resolving criminal disputes. *A grade of C (2.0) or higher is required for all courses to be counted toward the major.* Three hrs. lect., 2 hrs. act.

CRJA 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least a 2.0 GPA; departmental approval of activity; junior or senior standing. A maximum of 8 units of CRJA 3898 and/or CRJA 4128 may be applied to electives in the major. *A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 3999 - Issues in Criminal Justice

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in criminal justice. *A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 4123 - The Crime Victim

Units: 4

The criminal justice system from the perspective of the victim and the victim's needs/concerns. Various facets of victimology including: victimization data, victim compensation, psychological impacts of crime on victims, and alternatives to current remedies. *A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 4124 - Sex Crime Investigation

Units: 4

Theoretical foundations related to sexual crimes. Basic skills necessary to investigate sexual assault cases, collection and preserving physical evidence, interviewing and interrogation of subjects and victims, and successful preparation of cases for presentation. *Prerequisites: CRJA 2200 or consent of instructor. A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 4125 - Women in Criminal Justice

Units: 4

Women as victims, offenders and prisoners; gender sentencing differentials; women in criminal justice professions such as policing, corrections, and courts. *A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 4127 - Crime Theory

Units: 4

Major social, psychological and biological theories of crime causation. Historical and current applications of theory to justice administration and offender treatment and rehabilitation. *A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 4128 - Internship in Criminal Justice

Units: 4

Practical experience in a department-approved criminal justice agency (public or private). Academic assignments integrated with volunteer or paid activities. *Prerequisites: Departmental approval of activity. Junior or senior standing. A maximum of 8 units of 3898 and/or 4128 may be applied to electives in major. A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 4330 - Prejudice, Violence, and Hate Crimes

Units: 4

Exploration of the characteristics, prevalence, causes, penalties, and constitutional issues regarding hate crimes and hate speech. The history, social contexts, and political controversies surrounding hate crimes, as well as other components of prejudice and violence, will be examined. *A-F grading only. A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 4530 - Youth Crime & Empowerment: Experiential Learning

Units: 4

Examination of the impact of victimization and trauma on childhood development. Emphasis on youth empowerment strategies; utilizes experiential learning that involves mentoring students, providing youth with information about community resources, and assisting youth with college applications and expectations. *Repeatable for a maximum of 8 units. A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 4700 - Community Based Corrections

Units: 4

The role of local, state and federal government in the development of community-based correctional programs. Alternatives to incarceration of the criminal. Topics include halfway houses of correction, community furlough and ex-offender employment. *A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 4710 - Drugs, Law, and Society: Race, Gender and U.S. Drug Policy

Units: 4

Exploration of current U.S. drug policy and consequences, such as mass incarceration. Includes historical drug scares, the War on Drugs and repercussions, drug treatment, decriminalization, race and gender analysis. *A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 4730 - Restorative Justice

Units: 4

Critical look at how restorative justice responds to crime by holding offenders accountable for harm committed, repairing harm to victims and community, and promoting skills in offenders to prevent crime recurrence. *A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 4770 - Criminal Law and the Courts

Units: 4

principles of criminal law; criminal liability and complicity; defenses, justifications, and excuses; crimes against persons, crimes against property, and crimes against public order; and court procedures/sentencing. *A-F grading only. A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 4830 - Seminar in Forensic Research

Units: 1

Criminal justice aspects of forensic research. Current issues in forensic science based on scientific, legal, and criminal justice concerns. *Prerequisites: Consent of instructor. A grade of C (2.0) or higher is required for all courses to be counted toward the major.*

CRJA 4900 - Independent Study

Units: 1-4

A grade of C (2.0) or higher is required for all courses to be counted toward the major.

Dance

DANC 1131 - Beginning Technique Classes: Beginning Hip Hop Dance I

Units: 1

Beginning dance techniques. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 1000 series.

DANC 1132 - Beginning Technique Classes: Beginning Hip Hop Dance II

Units: 1

Beginning dance techniques. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 1000 series.

DANC 1133 - Beginning Technique Classes: Beginning Hip Hop Dance III

Units: 1

Beginning dance techniques. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 1000 series.

DANC 1135 - Beginning Technique Classes: Beginning Breakdance I

Units: 1

Beginning dance techniques. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 1000 series.

DANC 1136 - Beginning Technique Classes: Beginning Breakdance II

Units: 1

Beginning dance techniques. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 1000 series.

DANC 1141 - Beginning Technique Classes: Beginning Modern Dance I

Units: 1

Beginning dance techniques. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 1000 series.

DANC 1142 - Beginning Technique Classes: Beginning Modern Dance II

Units: 1

Beginning dance techniques. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 1000 series.

DANC 1143 - Beginning Technique Classes: Beginning Modern Dance III

Units: 1

Beginning dance techniques. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 1000 series.

DANC 1151 - Beginning Technique Classes: Beginning Tap Dance I

Units: 1

Beginning dance techniques. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 1000 series.

DANC 1152 - Beginning Technique Classes: Beginning Tap Dance II

Units: 1

Beginning dance techniques. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 1000 series.

DANC 1153 - Beginning Technique Classes: Beginning Tap Dance III

Units: 1

Beginning dance techniques. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 1000 series.

DANC 1171 - Beginning Technique Classes: Beginning Jazz Dance I

Units: 1

Beginning dance techniques. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 1000 series.

DANC 1172 - Beginning Technique Classes: Beginning Jazz Dance II

Units: 1

Beginning dance techniques. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 1000 series.

DANC 1173 - Beginning Technique Classes: Beginning Jazz Dance III

Units: 1

Beginning dance techniques. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 1000 series.

DANC 1181 - Beginning Technique Classes: Beginning Ballroom Dance I

Units: 1

Beginning dance techniques. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 1000 series.

DANC 1182 - Beginning Technique Classes: Beginning Ballroom Dance II

Units: 1

Beginning dance techniques. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 1000 series.

DANC 1183 - Beginning Technique Classes: Beginning Ballroom Dance III

Units: 1

Beginning dance techniques. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 1000 series.

DANC 1191 - Beginning Technique Classes: Beginning Ballet Dance I

Units: 1

Beginning dance techniques. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 1000 series.

DANC 1192 - Beginning Technique Classes: Beginning Ballet Dance II

Units: 1

Beginning dance techniques. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 1000 series.

DANC 1193 - Beginning Technique Classes: Beginning Ballet Dance III

Units: 1

Beginning dance techniques. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 1000 series.

DANC 1201 - Dance for All Bodies and Abilities

Units: 4

Study of personal identity, community and body image. The role of the arts in understanding gender, race, sexual orientation, disability, age, and culture. The creative expression of themes of social change through dance. Composition exercises that include theatre and music. Not open to students with credit for DANC 1202 or DANC 1203.

DANC 1202 - World Dance: Oral Traditions and the Stage

Units: 4

An exploration of cultural dances from around the world and the oral traditions and storytelling from which they come. Individual projects on movement and literature of world cultures. Not open to students with credit for DANC 1201 or DANC 1203.

DANC 1203 - Exploring the Creative and Spiritual

Units: 4

Theory of creative means used by artists throughout history to make art. Solo and collaborative stage performance exercises directed at releasing creative energies, expanding mental boundaries, and increasing the range of expressive means. Not open to students with credit for THEA 1201 or 1202.

DANC 2003 - Intermediate Folk Dance

Units: 1

May be repeated once, for a maximum of 2 units. Two hrs. act.

DANC 2020 - Rhythm and Music for Dance

Units: 2

Study and exploration of common rhythmic and musical forms used for dance accompaniment. Composition of and improvisation to simple rhythmic scores.

DANC 2023 - Dance Fitness

Units: 2

Conditioning the body through the use of weights, both free and Nautilus. Proper stretching techniques and dietary considerations. May be repeated two times for credit, for a maximum of 6 units.

DANC 2111 - Intermediate Technique Classes: Intermediate Latin Dance I

Units: 1

Intermediate dance techniques. Requires one year of beginning technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 2000 series.

DANC 2112 - Intermediate Technique Classes: Intermediate Latin Dance II

Units: 1

Intermediate dance techniques. Requires one year of beginning technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 2000 series.

DANC 2114 - Intermediate Technique Classes: Intermediate Latin Dance IV

Units: 1

Intermediate dance techniques. Requires one year of beginning technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 2000 series.

DANC 2115 - Intermediate Technique Classes: Intermediate Latin Dance V

Units: 1

Intermediate dance techniques. Requires one year of beginning technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 2000 series.

DANC 2116 - Intermediate Technique Classes: Intermediate Latin Dance VI

Units: 1

Intermediate dance techniques. Requires one year of beginning technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 2000 series.

DANC 2120 - Musical Theatre Dance A

Units: 2

Dance techniques, interpretation, and choreography applicable to musical theatre. Might concentrate on dance related to current production, but will expand to other fundamentals. May be taken in any order. *Prerequisites: One quarter of Jazz Technique or consent of instructor.*

DANC 2121 - Musical Theatre Dance B

Units: 2

Dance techniques, interpretation, and choreography applicable to musical theatre. Might concentrate on dance related to current

production, but will expand to other fundamentals. May be taken in any order. *Prerequisites: One quarter of Jazz Technique or consent of instructor.*

DANC 2122 - Musical Theatre Dance C

Units: 2

Dance techniques, interpretation, and choreography applicable to musical theatre. Might concentrate on dance related to current production, but will expand to other fundamentals. May be taken in any order. *Prerequisites: One quarter of Jazz Technique or consent of instructor.*

DANC 2123 - Musical Theatre Dance D

Units: 2

Dance techniques, interpretation, and choreography applicable to musical theatre. Might concentrate on dance related to current production, but will expand to other fundamentals. May be taken in any order. *Prerequisites: One quarter of Jazz Technique or consent of instructor.*

DANC 2124 - Musical Theatre Dance E

Units: 2

Dance techniques, interpretation, and choreography applicable to musical theatre. Might concentrate on dance related to current production, but will expand to other fundamentals. May be taken in any order. *Prerequisites: One quarter of Jazz Technique or consent of instructor.*

DANC 2125 - Musical Theatre Dance F

Units: 2

Dance techniques, interpretation, and choreography applicable to musical theatre. Might concentrate on dance related to current production, but will expand to other fundamentals. May be taken in any order. *Prerequisites: One quarter of Jazz Technique or consent of instructor.*

DANC 2131 - Intermediate Technique Classes: Intermediate Hip Hop Dance I

Units: 1

Intermediate dance techniques. Requires one year of beginning technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 2000 series.

DANC 2132 - Intermediate Technique Classes: Intermediate Hip Hop Dance II

Units: 1

Intermediate dance techniques. Requires one year of beginning technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 2000 series.

DANC 2141 - Intermediate Technique Classes: Intermediate Modern Dance I

Units: 1

Intermediate dance techniques. Requires one year of beginning technique or instructor's permission. Audition during first meeting

to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 2000 series.

DANC 2142 - Intermediate Technique Classes: Intermediate Modern Dance II

Units: 1

Intermediate dance techniques. Requires one year of beginning technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 2000 series.

DANC 2151 - Intermediate Technique Classes: Intermediate Tap Dance I

Units: 1

Intermediate dance techniques. Requires one year of beginning technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 2000 series.

DANC 2152 - Intermediate Technique Classes: Intermediate Tap Dance II

Units: 1

Intermediate dance techniques. Requires one year of beginning technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 2000 series.

DANC 2153 - Intermediate Technique Classes: Intermediate Tap Dance III

Units: 1

Intermediate dance techniques. Requires one year of beginning technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 2000 series.

DANC 2161 - Intermediate Technique Classes: Intermediate Capoeira I

Units: 1

Intermediate dance techniques. Requires one year of beginning technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 2000 series.

DANC 2162 - Intermediate Technique Classes: Intermediate Capoeira II

Units: 1

Intermediate dance techniques. Requires one year of beginning technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 2000 series.

DANC 2163 - Intermediate Technique Classes: Intermediate Capoeira I

Units: 1

Intermediate dance techniques. Requires one year of beginning technique or instructor's permission. Audition during first meeting

to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 2000 series.

DANC 2171 - Intermediate Technique Classes: Intermediate Jazz Dance I

Units: 1

Intermediate dance techniques. Requires one year of beginning technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 2000 series.

DANC 2172 - Intermediate Technique Classes: Intermediate Jazz Dance II

Units: 1

Intermediate dance techniques. Requires one year of beginning technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 2000 series.

DANC 2173 - Intermediate Technique Classes: Intermediate Jazz Dance III

Units: 1

Intermediate dance techniques. Requires one year of beginning technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 2000 series.

DANC 2191 - Intermediate Technique Classes: Intermediate Ballet Dance I

Units: 1

Intermediate dance techniques. Requires one year of beginning technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 2000 series.

DANC 2192 - Intermediate Technique Classes: Intermediate Ballet Dance II

Units: 1

Intermediate dance techniques. Requires one year of beginning technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 2000 series.

DANC 2193 - Intermediate Technique Classes: Intermediate Ballet Dance III

Units: 1

Intermediate dance techniques. Requires one year of beginning technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for former courses in the same technique in the DANC 2000 series.

DANC 2221 - World Folk Dance A

Units: 1

Introduction to traditional folk dances from around the world as a means of experiencing dance as a community-building art form

and a celebration of diversity. Accessible dances taught in groups, partners and individual movement patterns, including improvisation techniques.

DANC 2222 - World Folk Dance B

Units: 1

Introduction to traditional folk dances from around the world as a means of experiencing dance as a community-building art form and a celebration of diversity. Accessible dances taught in groups, partners and individual movement patterns, including improvisation techniques.

DANC 2223 - World Folk Dance C

Units: 1

Introduction to traditional folk dances from around the world as a means of experiencing dance as a community-building art form and a celebration of diversity. Accessible dances taught in groups, partners and individual movement patterns, including improvisation techniques.

DANC 2331 - Mixed Ability Dance A

Units: 2

Methods for including all physical abilities and disabilities, body types, and experience levels in the creation of artistic dance performance. Trust exercises, improvisation, and technique. Informal presentations and performance videos.

DANC 2332 - Mixed Ability Dance B

Units: 2

Methods for including all physical abilities and disabilities, body types, and experience levels in the creation of artistic dance performance. Trust exercises, improvisation, and technique. Informal presentations and performance videos.

DANC 2333 - Mixed Ability Dance C

Units: 2

Methods for including all physical abilities and disabilities, body types, and experience levels in the creation of artistic dance performance. Trust exercises, improvisation, and technique. Informal presentations and performance videos.

DANC 2336 - Sex, Race, and Body Politics in Dance B

Units: 2

Contemporary approaches to dance that address diversity in sexual identity, gender, race, body image, and culture. Special focus on cutting-edge Bay Area artists and trends. Techniques for combining dance, theatre, personal narratives, cultural forms, and current technology.

DANC 2337 - Sex, Race, and Body Politics in Dance C

Units: 2

Contemporary approaches to dance that address diversity in sexual identity, gender, race, body image, and culture. Special focus on cutting-edge Bay Area artists and trends. Techniques for combining dance, theatre, personal narratives, cultural forms, and current technology.

DANC 2341 - Improvisation in Art and Life

Units: 2

Improvisation as a vehicle for deepening artistic expression, performance skills, body awareness, health, and communication. Integrates techniques from modern dance, music, dance theatre, martial arts, sports and more. Inclusive for people of all sizes, shapes, ages and abilities/disabilities. May be repeated once for credit, for a maximum of 4 units. Theatre majors/minors and Dance minors must take their first attempt for a letter grade only.

DANC 2342 - Integrating Theatre and Dance

Units: 2

Techniques for integrating movement, text, sound, and personal experience with diverse styles to create inclusive and vital contemporary performance. Fosters creative and innovative problem-solving. Inclusive, for people of all sizes, shapes, ages and abilities/disabilities. May be repeated once for credit for a maximum of 4 units. Theatre majors/minors and Dance minors must take their first attempt for a letter grade only.

DANC 2343 - Body and Mind Training for Performance

Units: 2

Overview of somatic approaches to training for dance, theatre, music, sports, public speaking and more. Combines modern dance and martial arts with diverse approaches to understanding and harnessing the full range of body systems for increased efficiency and health. May be repeated once for credit for a maximum of 4 units. Theatre majors/minors and Dance minors must take their first attempt for a letter grade only.

DANC 2344 - Site Specific Performance

Units: 2

Overview of techniques and approaches for performing outside the context of a fully furnished theatre. Covers movement, sound, text, image, design, improvisation and composition. Opportunities for studying, experimenting, and performing in multiple styles and settings. May be repeated once for credit for a maximum of 4 units. Theatre majors/minors and Dance minors must take their first attempt for a letter grade only.

DANC 3022 - Improvisation and Beyond

Units: 3

Exploration of movement through improvisational techniques leading to dance making. Stepping stones to the development of choreography and performance. Fosters a supportive atmosphere while crafting dances through an individual approach.

DANC 3026 - Jazz and Modern Dance

Units: 2

Jazz and modern dance technique with repertory experience. Students will have experience in both styles and learn repertory. Performances at the end of quarter.

DANC 3101 - Dance Ensemble Technique A

Units: 1

Jazz and modern dance technique with repertory experience. Students will have experience in both styles and learn repertory. Performances at the end of quarter.

DANC 3102 - Dance Ensemble Technique B

Units: 1

Jazz and modern dance technique with repertory experience. Students will have experience in both styles and learn repertory. Performances at the end of quarter.

DANC 3103 - Dance Ensemble Technique C

Units: 1

Jazz and modern dance technique with repertory experience. Students will have experience in both styles and learn repertory. Performances at the end of quarter.

DANC 3104 - Dance Ensemble Technique D

Units: 1

Jazz and modern dance technique with repertory experience. Students will have experience in both styles and learn repertory. Performances at the end of quarter.

DANC 3105 - Dance Ensemble Technique E

Units: 1

Jazz and modern dance technique with repertory experience. Students will have experience in both styles and learn repertory. Performances at the end of quarter.

DANC 3106 - Dance Ensemble Technique F

Units: 1

Jazz and modern dance technique with repertory experience. Students will have experience in both styles and learn repertory. Performances at the end of quarter.

DANC 3135 - Advanced Technique Classes: Advanced Breakdance I

Units: 2

Advanced dance techniques. Requires one year each of beginning and intermediate technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for the same technique in former DANC 3000 series.

DANC 3136 - Advanced Technique Classes: Advanced Breakdance II

Units: 2

Advanced dance techniques. Requires one year each of beginning and intermediate technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for the same technique in former DANC 3000 series.

DANC 3137 - Advanced Technique Classes: Advanced Breakdance III

Units: 2

Advanced dance techniques. Requires one year each of beginning and intermediate technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for the same technique in former DANC 3000 series.

DANC 3151 - Advanced Technique Classes: Advanced Tap Dance I

Units: 1

Advanced dance techniques. Requires one year each of beginning and intermediate technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for the same technique in former DANC 3000 series.

DANC 3152 - Advanced Technique Classes: Advanced Tap Dance II

Units: 1

Advanced dance techniques. Requires one year each of beginning and intermediate technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for the same technique in former DANC 3000 series.

DANC 3153 - Advanced Technique Classes: Advanced Tap Dance III

Units: 1

Advanced dance techniques. Requires one year each of beginning and intermediate technique or instructor's permission. Audition during first meeting to take course out of sequence. Not open to students with two units of credit for the same technique in former DANC 3000 series.

DANC 3235 - Dance for Children

Units: 4

Theory and techniques for developing movement and expressive capabilities of the child through dance participation. Opportunities to work with children are provided. *Prerequisites:* Beginning level dance course (e.g. DANC 1000 series) or consent of instructor.

DANC 3251 - Movement Analysis

Units: 4

How movement communicates and functions in society. Observation, analysis, coaching, and recording of movement; functional alignment (Feldenkrais, Ideokinesis); movement theory (Laban, Bartenieff); cross-cultural models. Helpful for actors, dancers, athletes, coaches, animators, and teachers. *Prerequisites:* Two quarters of any technique, or consent of instructor.

DANC 3252 - Dance Through the Ages

Units: 4

The history and evolution of dance from preliterate cultures and ancient civilizations to medieval and Renaissance periods, including anthropological and religious sources. Not open to students with credit for DANC 4200.

DANC 3300 - Sex, Race, and Body Politics in Dance

Units: 4

Questions of identity, such as "Who am I?" and "Why can't I?", are explored through examples from the dance world. Focus on groups marginalized because of race, gender, sexual orientation, age, body size, disability, lifestyle. Arts for empowerment.

DANC 3330 - The Digital Stage: Dance on Camera

Units: 4

Students direct, perform, shoot, edit and distribute dance and theatre works in digital format. Includes history and aesthetics of

dance for the camera; video production, editing, marketing and podcasting of live performance; portfolio development and design.

DANC 3426 - Collaborative Dance and Theatre

Units: 3

Collaborative theatre techniques to develop and produce a Spring Concert. Dance, music, and theatre utilized in the production with attention to the development of original score, choreography and text. May be repeated two times for credit, for a maximum of 9 units.

DANC 3451 - Dance Ensemble A

Units: 3

Dance stylizations and composition. Content varies with instructor; may include improvisation, dance theatre, production problems, etc. Course sequence may be taken in any order. Open to all by audition in any technique course. Concurrent enrollment in Dance Ensemble Technique recommended.

DANC 3452 - Dance Ensemble B

Units: 3

Dance stylizations and composition. Content varies with instructor; may include improvisation, dance theatre, production problems, etc. Course sequence may be taken in any order. Open to all by audition in any technique course. Concurrent enrollment in Dance Ensemble Technique recommended.

DANC 3453 - Dance Ensemble C

Units: 3

Dance stylizations and composition. Content varies with instructor; may include improvisation, dance theatre, production problems, etc. Course sequence may be taken in any order. Open to all by audition in any technique course. Concurrent enrollment in Dance Ensemble Technique recommended.

DANC 3454 - Dance Ensemble D

Units: 3

Dance stylizations and composition. Content varies with instructor; may include improvisation, dance theatre, production problems, etc. Course sequence may be taken in any order. Open to all by audition in any technique course. Concurrent enrollment in Dance Ensemble Technique recommended.

DANC 3455 - Dance Ensemble E

Units: 3

Dance stylizations and composition. Content varies with instructor; may include improvisation, dance theatre, production problems, etc. Course sequence may be taken in any order. Open to all by audition in any technique course. Concurrent enrollment in Dance Ensemble Technique recommended.

DANC 3456 - Dance Ensemble F

Units: 3

Dance stylizations and composition. Content varies with instructor; may include improvisation, dance theatre, production

problems, etc. Course sequence may be taken in any order. Open to all by audition in any technique course. Concurrent enrollment in Dance Ensemble Technique recommended.

DANC 3461 - Inclusive Interdisciplinary Ensemble A

Units: 2

Interplay between movement and music in performance and other modes of expression. Inclusive, for people of all sizes, shapes, ages and abilities/disabilities.

DANC 3462 - Inclusive Interdisciplinary Ensemble B

Units: 2

Integrating dance and theatre techniques; deepening understanding and application of physical theatre. Inclusive, for people of all sizes, shapes, ages and abilities/disabilities.

DANC 3463 - Inclusive Interdisciplinary Ensemble C

Units: 2

Exploration of diverse approaches to site-specific and "do-it-yourself" performance, including traditional and experimental methods. Inclusive, for people of all sizes, shapes, ages and abilities/disabilities.

DANC 3464 - Inclusive Interdisciplinary Ensemble D

Units: 2

Approaches to dance accessible to people with and without disabilities and of all sizes, shapes, ages and abilities/disabilities. Covers movement invention, technique and composition.

DANC 3465 - Inclusive Interdisciplinary Ensemble E

Units: 2

Focus on techniques for movement, sound and theatrical improvisation grounded in the study of Contact Improvisation and dance techniques from traditional to contemporary. Accessible to people of all sizes, shapes, ages and abilities/disabilities.

DANC 3466 - Inclusive Interdisciplinary Ensemble F

Units: 2

Explores application of technique to physical, mental and emotional fitness, relationship of fitness to training for performance. Focus on approaching performance in long-term, sustainable ways. Accessible to people of all sizes, shapes, ages and abilities/disabilities.

DANC 3999 - Issues in Dance

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in dance. May be repeated for credit when content varies, for a maximum of 8 units.

DANC 4131 - Advanced Dance Technique Courses: Advanced Hip Hop Dance I

Units: 2

Advanced or intermediate/advanced dance technique courses. *Prerequisites: Previous training at beginning and intermediate levels. Eligibility determined by audition at first class meeting. Each course repeatable once for credit for a maximum of 4 units.*

DANC 4132 - Advanced Dance Technique Courses: Advanced Hip Hop Dance II

Units: 2

Advanced or intermediate/advanced dance technique courses. *Prerequisites: Previous training at beginning and intermediate levels. Eligibility determined by audition at first class meeting. Each course repeatable once for credit for a maximum of 4 units.*

DANC 4133 - Advanced Dance Technique Courses: Advanced Hip Hop Dance III

Units: 2

Advanced or intermediate/advanced dance technique courses. *Prerequisites: Previous training at beginning and intermediate levels. Eligibility determined by audition at first class meeting. Each course repeatable once for credit for a maximum of 4 units.*

DANC 4135 - Advanced Dance Technique Courses: Advanced Breakdance I

Units: 2

Advanced or intermediate/advanced dance technique courses. *Prerequisites: Previous training at beginning and intermediate levels. Eligibility determined by audition at first class meeting. Each course repeatable once for credit for a maximum of 4 units.*

DANC 4136 - Advanced Dance Technique Courses: Advanced Breakdance II

Units: 2

Advanced or intermediate/advanced dance technique courses. *Prerequisites: Previous training at beginning and intermediate levels. Eligibility determined by audition at first class meeting. Each course repeatable once for credit for a maximum of 4 units.*

DANC 4137 - Advanced Dance Technique Courses: Advanced Breakdance III

Units: 2

Advanced or intermediate/advanced dance technique courses. *Prerequisites: Previous training at beginning and intermediate levels. Eligibility determined by audition at first class meeting. Each course repeatable once for credit for a maximum of 4 units.*

DANC 4141 - Advanced Dance Technique Courses: Advanced Modern Dance I

Units: 2

Advanced or intermediate/advanced dance technique courses. *Prerequisites: Previous training at beginning and intermediate levels. Eligibility determined by audition at first class meeting. Each course repeatable once for credit for a maximum of 4 units.*

DANC 4142 - Advanced Dance Technique Courses: Advanced Modern Dance II

Units: 2

Advanced or intermediate/advanced dance technique courses. *Prerequisites: Previous training at beginning and intermediate levels. Eligibility determined by audition at first class meeting. Each course repeatable once for credit for a maximum of 4 units.*

DANC 4143 - Advanced Dance Technique Courses: Advanced Modern Dance III

Units: 2

Advanced or intermediate/advanced dance technique courses. *Prerequisites: Previous training at beginning and intermediate levels. Eligibility determined by audition at first class meeting. Each course repeatable once for credit for a maximum of 4 units.*

DANC 4171 - Advanced Dance Technique Courses: Advanced Jazz Dance I

Units: 2

Advanced or intermediate/advanced dance technique courses. *Prerequisites: Previous training at beginning and intermediate levels. Eligibility determined by audition at first class meeting. Each course repeatable once for credit for a maximum of 4 units.*

DANC 4172 - Advanced Dance Technique Courses: Advanced Jazz Dance II

Units: 2

Advanced or intermediate/advanced dance technique courses. *Prerequisites: Previous training at beginning and intermediate levels. Eligibility determined by audition at first class meeting. Each course repeatable once for credit for a maximum of 4 units.*

DANC 4173 - Advanced Dance Technique Courses: Advanced Jazz Dance I

Units: 2

Advanced or intermediate/advanced dance technique courses. *Prerequisites: Previous training at beginning and intermediate levels. Eligibility determined by audition at first class meeting. Each course repeatable once for credit for a maximum of 4 units.*

DANC 4191 - Advanced Dance Technique Courses: Advanced/Intermediate Ballet Dance I

Units: 2

Advanced or intermediate/advanced dance technique courses. *Prerequisites: Previous training at beginning and intermediate levels. Eligibility determined by audition at first class meeting. Each course repeatable once for credit for a maximum of 4 units.*

DANC 4192 - Advanced Dance Technique Courses: Advanced/Intermediate Ballet Dance II

Units: 2

Advanced or intermediate/advanced dance technique courses. *Prerequisites: Previous training at beginning and intermediate levels. Eligibility determined by audition at first class meeting. Each course repeatable once for credit for a maximum of 4 units.*

DANC 4193 - Advanced Dance Technique Courses: Advanced/Intermediate Ballet Dance III

Units: 2

Advanced or intermediate/advanced dance technique courses. *Prerequisites: Previous training at beginning and intermediate levels. Eligibility determined by audition at first class meeting. Each course repeatable once for credit for a maximum of 4 units.*

DANC 4201 - Dance in Modern Society

Units: 4

The development of dance from the post-Renaissance period to the present, i.e., modern dance, black dance, men in dance, social dance, musical theatre and avant garde. Social, political, psychological, and spiritual influences.

DANC 4900 - Independent Study

Units: 1-4

Developmental Writing

ENGL 0725 - Basic Reading and Composition for Speakers of English as a Second or Foreign Language I

Units: 4

Reading and writing for academic purposes, with special attention to the needs of those for whom English is a second or foreign language. *Prerequisites: Score of 150 or lower on EPT. Units do not count toward the baccalaureate degree. A/B/C/NC grading only.*

ENGL 0730 - Basic Reading and Composition for Speakers of English as a Second or Foreign Language II

Units: 4

Reading and writing for academic purposes, with special attention to the needs of those for whom English is a second or foreign language. *Prerequisites: Score of 150 or lower on EPT. Units do not count toward the baccalaureate degree. A/B/C/NC grading only.*

ENGL 0735 - Basic Reading and Composition for Speakers of English as a Second or Foreign Language III

Units: 4

Reading and writing for academic purposes, with special attention to the needs of those for whom English is a second or foreign language. *Prerequisites: Score of 150 or lower on EPT. Units do not count toward the baccalaureate degree. A/B/C/NC grading only.*

ENGL 0801 - The Intensive Learning Experience in Writing I

Units: 4

A three-course sequence in basic (remedial) writing, mandatory for students who have scored 141 and below on the English Placement Test (EPT). The workshops focus on the practice of standard written English. Classes may not be used as prerequisites to the Competency Program in Written English for Non-Native Speakers of English. Units do not count toward the baccalaureate degree. *Grading is A/B/C/NC only.*

ENGL 0802 - The Intensive Learning Experience in Writing II

Units: 4

A three-course sequence in basic (remedial) writing, mandatory for students who have scored 141 and below on the English Placement Test (EPT). The workshops focus on the practice of standard written English. Classes may not be used as prerequisites to the Competency Program in Written English for Non-Native Speakers of English. Units do not count toward the baccalaureate degree. *Grading is A/B/C/NC only.*

ENGL 0803 - The Intensive Learning Experience in Writing III

Units: 4

A three-course sequence in basic (remedial) writing, mandatory for students who have scored 141 and below on the English Placement Test (EPT). The workshops focus on the practice of standard written English. Classes may not be used as prerequisites

to the Competency Program in Written English for Non-Native Speakers of English. Units do not count toward the baccalaureate degree. *Grading is A/B/C/NC only.*

ENGL 0910 - Developmental Writing I

Units: 4

A writing workshop preparatory to the written communication requirements, ENGL 1001 and ENGL 1002. Developing college essay writing skills, with special attention to style and usage. *Prerequisites: Total Score on EPT of 142-146. Co-requisites: ENGL 0988 if ESL. Class may not be used as a prerequisite to the Competency Program in Written English Proficiency for Non-Native Speakers of English unless 0988 is taken concurrently. Units do not count toward baccalaureate degree. A/B/C/NC grading only.*

Entrepreneurship

ENTR 2485 - Establishing and Managing a Small Business

Units: 4

The fundamentals of establishing and operating a small business. *Prerequisites: ACCT 2251 or consent of instructor.* Not open for credit to majors in Business Administration or Economics.

ENTR 4485 - Establishing New Enterprises

Units: 4

In-depth coverage of procedures for setting up new businesses and of problems confronting managers during the critical start-up period; extensive use of cases, situational analyses, and projects. Recommended: ITM 3060. *Prerequisites: ACCT 2253; FIN 3300; MKTG 3401.*

ENTR 4490 - Practicum in Small Business Management

Units: 4

Student consultant teams assisting small businesses; responsibilities include reviewing performance; isolating problems; researching solutions; presenting oral analysis to class; preparing written reports for business. Recommended: ITM 3060. *Prerequisites: ACCT 2253; ECON 3551; FIN 3300; MGMT 3100; MKTG 3401. Prerequisite or Co-requisite: MKTG 3495.*

Entrepreneurship: Graduate

ENTR 6480 - Introduction to Entrepreneurship

Units: 4

Provides a survey of entrepreneurship and business ownership--including foundation concepts, the new venture creation process, financial estimation, and entrepreneurial decision-making. A highly participatory, integrative class, with lectures, case studies, extensive discussions, and student presentations. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update.*

ENTR 6485 - New Venture Development

Units: 4

Students select, research, design, structure, document, and persuasively present a business plan for a new or growing

entrepreneurial venture. Students learn and apply systematic approaches to business planning. A highly participatory, team-oriented, term project class. Strongly Recommended: ***See Errata chapter in this catalog concerning prerequisite update.**

ENTR 6800 - Entrepreneurship Practicum

Units: 4

An integrative capstone experience in which students learn to develop business strategies and write a strategic business plan. This course is formatted as an experiential, hands-on consulting project working with small to mid-sized enterprises. *Prerequisites:* ***See Errata chapter in this catalog concerning prerequisite update. A-F grading only.**

ENTR 6909 - Departmental Thesis

Units: 1-4

Development and writing of a research paper for submission to the department which specifies its format. Supervision by a faculty committee at least one of whom must be a Cal State East Bay faculty member.

Economics

ECON 1000 - Economics of Public Issues

Units: 4

An introduction to economics with a focus on using economic analysis to examine current social, political, and global issues. Topics covered may include pollution, health care, crime, poverty, unemployment, and inflation. Designed for non-business and economics majors. Not open to students with credit for ECON 1888, ECON 2301, or ECON 2302.

ECON 2301 - Principles of Microeconomics

Units: 4

Basic micro-economic concepts; introductory analysis of the determination of prices and output in different market situations; public policy. *Prerequisites:* *Sophomore standing and either credit for intermediate algebra or satisfactory score on the Entry-Level Math (ELM) Test.*

ECON 2302 - Principles of Macroeconomics

Units: 4

Basic macro-economic concepts; introductory analysis of the determination of national income and employment; money and banking; fiscal policy in a global context. *Prerequisites:* *Either credit for intermediate algebra or satisfactory score on the Entry-Level Math (ELM) Test.*

ECON 3000 - Micro-Economic Theory

Units: 4

Analysis of supply and demand; production and costs; price and output determination; factor pricing and income distribution; optimum resource allocation. *Prerequisites:* *STAT 2010 or STAT 1000; MATH 1130 and ECON 2301 with grade not lower than a "C".*

ECON 3005 - Macro-Economic Theory

Units: 4

Measurement and analysis of the determination of national income and employment; general price level; stabilization and growth. *Prerequisites: ECON 2301, 2302, with a grade not lower than "C" in ECON 2302.* Not open to students with credit for ECON 3006.

ECON 3006 - Macro-Economics for Business

Units: 4

Current topics such as inflation, employment and unemployment, interest rates, exchange rates, the business cycle, and macroeconomic policies presented in a manner most useful for business students or any student interested in real-world economic issues. *Prerequisites: ECON 2301, 2302, with a grade not lower than "C" in ECON 2302.* Not open to students with credit for ECON 3005.

ECON 3107 - Global Economic Analysis

Units: 4

Analysis of the microeconomics and macroeconomics of global trade, growth, development, investment, foreign exchange markets, international capital movements, global competitiveness, international treaties and laws. *Prerequisites: ECON 2301, ECON 2302, with a grade not lower than a "C" in both courses.* Not open to students with credit for ECON 4700 or ECON 4705.

ECON 3140 - Engineering Economy

Units: 4

(See ENGR 3140 for course description.)

ECON 3170 - History of Economic Thought

Units: 4

The key theories and individuals in the history of economic thought including Adam Smith, David Ricardo, and Karl Marx. *Prerequisites: ECON 2301 and ECON 2302.*

ECON 3200 - Comparative Economic Systems

Units: 4

Comparative study of different economic systems proposed or used to deal with the economic organization of society. *Prerequisites: ECON 2301.*

ECON 3310 - Money, Banking, and Financial Intermediaries

Units: 4

Essentials of commercial and central banking; financial intermediaries; monetary policy. *Prerequisites: ECON 2302.*

ECON 3370 - Public Sector Economics

Units: 4

Public sector economics; taxation, welfare economics, public goods, the rationale of government activity and collective choice. *Prerequisites: ECON 2301 and ECON 2302.*

ECON 3375 - Public Choice: The Economics of Politics

Units: 4

Economic theory applied to political institutions and decision-making within governments. Allocations under various property right systems; coalitions and voting behavior; theory of constitutions; theory of bureaucracy; political economy of income redistribution, crime, violence, discrimination, federalism, nationalism, anarchy. *Prerequisites: ECON 2301.*

ECON 3500 - Urban Economics

Units: 4

Economic analysis of the forces determining an urban area's income, employment, land use, industrial structure, and public sector. Applications to issues such as housing, central city-suburban relationships, transportation, and neighborhood economic development. *Prerequisites: ECON 2301.*

ECON 3551 - Managerial Economics and Business Strategy

Units: 4

The actions and reactions of business firms and consumers in a variety of market environments, emphasizing their strategies for optimization. Course not recommended for Economics majors. *Prerequisites: ECON 2301, STAT 2010 or STAT 1000 and MATH 1810 or MATH 1304.*

ECON 3555 - Economics of Innovation and Intellectual Property

Units: 4

Examination of the conditions and mechanisms that promote firms to undertake research and development. Topics include IP licensing, network effects and standards, the role of the U.S. patent system, alternative incentive mechanisms, technological diffusion, and the U.S. copyright system. *Prerequisites: ECON 3000 and ECON 3001; or, non-majors may substitute ECON 3000 and ECON 3001 with ECON 3551.*

ECON 3560 - Economics of Information and Organizations

Units: 4

Introduction to information economics as it pertains to issues in management and governance. Application of agency theory, positive/adverse selection, rent-seeking, and learning models to the optimal design of incentives and organizations. Explanation of monitoring mechanisms in the US financial system (investment banks, rating agencies, regulators) and the evolution of corporate structures, business models, and entrepreneurship. *Prerequisites: ECON 2301, MATH 1810, STAT 2010 or equivalents. A-F grading only.*

ECON 3680 - Labor Economics

Units: 4

Economic analysis of labor markets, including wages and wage determination, investments in human capital, employment and unemployment. *Prerequisites: ECON 2301.*

ECON 3690 - Health Economics and Public Policy

Units: 4

Economics of health and healthcare. Application of economic theories to public policy in health sector. Cost analysis, healthcare financing, public and private health insurance, and provider reimbursement models. Analysis of medical education, hospital, pharmaceutical, mental health, and long-term care markets. *Prerequisites: ECON 2301, HSC 3300. Cross-listed HSC 3690. A-F grading only.*

ECON 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities within the quarter enrolled. *Prerequisites: At least 2.0 GPA: departmental approval of activity.* Not for credit toward the Economics major or minor. *CR/NC grading only.*

ECON 3999 - Issues in Economics

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in economics.

ECON 4000 - Mathematical Economics

Units: 4

Application of linear algebra, differential calculus, and probability theory to microeconomic analysis. Topics include market equilibrium, properties of production functions, uncertainty, optimization methods, and comparative static analysis.

Prerequisites: ECON 3000 or ECON 3551; MATH 1810 or MATH 1304; STAT 2010 or STAT 1000.

ECON 4306 - Environmental Economics

Units: 4

Readings, reports and discussion on economic aspects of environmental problems and alternative proposed solutions: pollution, congestion, population. *Prerequisites: ECON 2301.*

ECON 4315 - Monetary Theory

Units: 4

Review of current literature on the demand for and supply of money; effects of monetary policy on inflation, unemployment, interest rates, and balance of payments. *Prerequisites: ECON 3310.*

ECON 4400 - Introduction to Econometrics

Units: 4

Applications of statistical techniques to obtain quantitative estimates of relationships suggested by economic analysis.

Prerequisites: ECON 2301, ECON 2302; STAT 2010 or STAT 1000.

ECON 4520 - Industrial Organization and Public Policy

Units: 4

Factors determining industrial organization and economic behavior; operation of antitrust laws; public regulation. *Prerequisites: ECON 3000 or ECON 3551.*

ECON 4590 - Selected Topics in Economic Analysis

Units: 4

Application of economic analysis to past/contemporary economic issues. *Prerequisites: ECON 2301 or ECON 2302; see current class schedule for which course is required.*

ECON 4700 - International Trade

Units: 4

Comprehensive coverage of the modern theory of international trade, foreign investment, the nature and effects of protection, multinational enterprise, world economic growth and international trading systems. *Prerequisites: ECON 2301, ECON 2302.*

ECON 4705 - International Finance

Units: 4

Comprehensive coverage of the organization, operation and theory of foreign exchange markets, Eurocurrency and offshore financial markets, balance of payments and international adjustment, international capital flows and different types of international monetary systems. *Prerequisites: ECON 2301, ECON 2302 (formerly ECON 4105).*

ECON 4710 - International Economic Development

Units: 4

Analyze the factors and theories underlying international economic development with a concentration on the nature and causes of development in Africa, Asia, Central and South America. *Prerequisites: ECON 2301 (formerly ECON 4110).*

ECON 4895 - Workshop in Economic Research

Units: 1

Workshop activity in the preparation, presentation, and evaluation of student and faculty research projects. *Prerequisites: At least junior standing.*

ECON 4896 - Senior Research

Units: 1

Development of an economic research paper that demonstrates the ability to: 1) think critically, analytically, and creatively; 2) gather, recognize, interpret, and communicate data. *Prerequisites: ECON 3000 or ECON 3551, ECON 3005 or ECON 3006, STAT 2010 or STAT 1000.*

ECON 4900 - Independent Study

Units: 1-4

Economics: Graduate

Students who are not graduate students in the College of Business and Economics must consult with the instructor before registering for a graduate course in Economics.

ECON 6101 - Seminar: Micro-Economic Theory I

Units: 4

First of two-quarter sequence: Selected topics in periodical literature in consumer behavior; price determination; and resource allocation patterns in a decentralized economy.

ECON 6102 - Seminar: Micro-Economic Theory II

Units: 4

Second of two-quarter sequence: Selected topics in periodical literature in general equilibrium; welfare theory and economic efficiency; capital theory.

ECON 6105 - Seminar: Macro-Economic Theory

Units: 4

Develops the tools of modern macroeconomics for an understanding of the macroeconomics literature. Topics include growth theory; Keynesian and modern micro-based theories of economic fluctuations; unemployment, monetary policy and fiscal policy.

ECON 6200 - Seminar: Comparative Economic Systems

Units: 4

Selected problems and approaches to resource allocation, income distribution, economic development, and planning in alternative economic systems.

ECON 6205 - Market Design: The Economics of Business Opportunities

Units: 4

Introduction to ways in which business opportunities can be identified and exploited by envisioning and creating new markets. Inefficiencies as potential sources of value. Market design: trading platforms, financial innovations, matching mechanisms, auctions, incentive systems as internal markets, etc. *Prerequisites: Graduate standing or consent of instructor.* A-F grading only.

ECON 6215 - Economics for Managers in a Global Economy

Units: 4

Economics for business managers - economic systems; supply, demand, prices and decision making in a global economy; interest rates and the value of currencies; the money supply process, business cycles, and inflation; market structures and production decisions; long-term economic growth determinants. Strongly Recommended: ***See Errata chapter in this catalog concerning prerequisite update.** Not for credit in the MA Economics degree or certificate. *A-F grading only.*

ECON 6225 - Corporate Governance and Entrepreneurship

Units: 4

Design of governance and incentive systems that maximize organization performance and minimize the cost of funds. Economic evidence on returns to entrepreneurship and unique issues new firms face. Corporate history including failures and relevant aspects of the financial system. *Prerequisites: Graduate standing or consent of instructor.* A-F grading only.

ECON 6250 - Seminar: Project Analysis

Units: 4

Benefit-cost analysis applied to resource allocation and planning. Applications to such areas as education, manpower programs, medical care, transportation, and non-profit enterprises.

ECON 6315 - Seminar: Monetary Theory

Units: 4

Review of periodical literature on static and dynamic issues of the supply and demand for money.

ECON 6370 - Seminar: Public Sector Economics

Units: 4

Economic analysis as applied to the public sector including public finance, welfare economics, public expenditure evaluation, theories of taxation, analysis of the U.S. tax structure, public choice, and policy issues.

ECON 6400 - Seminar: Econometrics

Units: 4

Statistical analysis of economic relationships. Regression analysis and simple time series analysis in economic applications.

ECON 6501 - Seminar: Urban and Regional Economics

Units: 4

Analysis of the structure of cities and the economies of regions. Explores why industries cluster geographically, where firms produce, where people live, and how urban or regional policies change local economies and affect poverty and other urban problems.

ECON 6511 - Advanced Applied Econometrics

Units: 4

Applied Statistical Models, including multiple regression, simultaneous equation models, time series models, and logistic regression/binary choice models. Cross-listed STAT 6511. *A-F grading only.*

ECON 6520 - Seminar: Industrial Organization and Public Policy

Units: 4

Selected topics in industrial organization and public policy including antitrust policy.

ECON 6555 - Seminar: Economics of Innovation and Intellectual Property

Units: 4

Examination of the conditions and mechanisms that promote firms to undertake research and development. Topics include IP licensing, network effects and standards, the role of the U.S. patent system, alternative incentive mechanisms, technological diffusion, and the U.S. copyright system.

ECON 6680 - Seminar: Labor Economics

Units: 4

Theoretical and empirical analysis of labor market operations with applications to public policy. Topics include investment in human capital, wages and wage determination, labor supply, employment and unemployment.

ECON 6710 - Seminar: International Economic Development

Units: 4

Selected topics in the theory and practice of international economic development with a focus on the nature and causes of development in specific areas and nations of the world.

ECON 6896 - Research Methods

Units: 5

Research methodologies, data analysis, and report writing. Provides students with analytic and research tools to increase their capacity to pose, answer, and critically evaluate research questions. Culminates in research project that synthesizes research methods, statistical analysis, and reporting of empirical results.

ECON 6898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities within the quarter enrolled. May be repeated for credit, for a maximum of 8 units. *CR/NC grading only.*

ECON 6900 - Independent Study

Units: 1-4

ECON 6910 - University Thesis

Units: 1-6

Development and writing of a formal research paper for submission to the University in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See also "University Thesis Writing Guide," www.csueastbay.edu/thesiswritingguide).

ECON 6999 - Issues in Economics

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in economics. May be repeated for credit when content varies, for a maximum of 8 units.

Education: Interdisciplinary: Graduate

See the Division of Continuing and International Education's course schedule for classes offered each quarter. For additional EDUI courses, see Teacher Education in the graduate section of this catalog.

EDUI 5900 - Independent Study

Units: 1-4

EDUI 6002 - Animation for the Web

Units: 2

Introduction to Flash, an animation tool for the Web; covers the basic functions that permit the educator to include multimedia features in lessons and student productions. A Flash movie may use text, graphics, sounds, animation, buttons and fields.

Prerequisites: Graduate standing or consent of instructor. May be repeated for credit when content varies, for a maximum of 10 units. Six hrs. lab.

EDUI 6005 - Digital Graphics

Units: 4

Introduction to several graphics programs such as Adobe Photoshop and Illustrator used in educational settings. Students learn to

use the drawing tools in these applications to edit, create, and manipulate graphics and millions of colors. *Prerequisites: Graduate standing or consent of instructor.* May be repeated for credit when content varies, for a maximum of 20 units. Twelve hrs. lab.

EDUI 6098 - Designing Effective Multimedia Instruction

Units: 4

Effective design and development of multimedia material to promote optional interactivity, performance, and motivation. Evaluation of educational multimedia products, design and development of original software, and examination of research on electronic learning. *Prerequisites: TED 5099 or equivalent.*

EDUI 6110 - Web as an Interactive Educational Tool

Units: 4

Design of instructional delivery via the Internet based on a study of the range of Internet-student/interactions, application of appropriate learning strategies, the potential of recent developments in the design/development of instruction, advanced topics in multimedia design. *Prerequisites: EDUI 5007 or consent of instructor.*

EDUI 6120 - Distance Learning Technologies and Applications

Units: 4

Rationale for the use of and critical analysis of various types of distance learning technologies. Current transmission options for distance learning. Instructional strategies for teaching using distance technologies. *Prerequisites: Consent of instructor.*

EDUI 6150 - Current Issues in Educational Technology

Units: 4

Current topics related to the assimilation of technology and planning in education. *Prerequisites: Completion of at least 12 units of the Educational Technology program.*

EDUI 6200 - Learning Theories and the Design of E-learning Environments

Units: 4

Identification of developmental theories in social and cognitive psychology, focusing on the characteristics of development, the nature of learning, the social influence on development and learning, and the foundation provided by these theories for the design of instructional multimedia programs. Three hrs. lect., 2 hrs. lab.

EDUI 6210 - Principles of Instructional Design

Units: 4

Instructional design theories and models in technology; application of design principles in the evaluation and creation of instructional materials including text; teacher-mediated instruction in multimedia. *Prerequisites: Graduate standing or consent of instructor.*

EDUI 6240 - Curriculum and Instruction in Mathematics, Science, and Technology

Units: 4

Designed to improve teaching and learning in mathematics, science, and technology. Prepares students to design innovative, technology-based curriculum using sound pedagogical approaches for improving teaching in mathematics and science. *Prerequisites: Graduate standing or consent of instructor.*

EDUI 6250 - Reading Research and Evaluation

Units: 4

Introduction to Xcode, Objective-C, and the iPhone SDK to develop applications for educational purposes. Creation of View-based, Tab Bar, Split-view. Applications with Popover, Modal, adding audio and video, and Gestures. *Prerequisites: EDUI 6005, EDUI 6110.* May be repeated once for credit when content varies, for a maximum of 8 units. (Course content varies each quarter to cover latest innovations in iPad technology.)

EDUI 6280 - Mathematics, Science and Technology in Education

Units: 4

Improve student's teaching and learning in mathematics, science and technology by: (1) providing understanding of learning theories that support instruction in mathematics and science using technology and, (2) designing innovative, technology-based curriculum with a sound pedagogical approach. *Prerequisites: Graduate standing or consent of instructor.* Three hrs. lect.; 2 hrs. act.

EDUI 6300 - Culture and the Evolution of Educational Technology

Units: 4

Cultural contexts in which educational technologies are situated and the consequent impact on growth of such technologies. Application of postmodern, feminist and multicultural perspectives to examine technology within educational cultures. *Prerequisites: Graduate standing or consent of instructor.*

EDUI 6315 - Current Technologies in Education

Units: 2

Current educational technologies and their use in the classroom. *Prerequisites: EDUI 5007 or consent of instructor.* May be repeated two times for credit with consent of instructor (or department), for a maximum of 6 units.

EDUI 6350 - Educational Technology in the Teaching of Language and Social Studies

Units: 4

Focus on some of the challenges involved in language learning and teaching with technology, and social contexts in which educational technologies are situated and the consequent impact on growth of such technologies. *Prerequisites: Graduate standing or consent of instructor.* Three hrs. lect.; 2 hrs. act.

EDUI 6400 - Educational Technology Planning for Innovation and Change

Units: 4

History of creative innovation and its effects on educational culture and thought. Critical examination of current innovative technologies for instruction at all levels, pre-school through professional. Strategies for instructional technology planning. *Prerequisites: EDUI 6210 or consent of instructor.*

EDUI 6420 - Technology Internship

Units: 4

Professional experience working with technology for one quarter with an educational or business organization. *Prerequisites: Advisor's approval.*

EDUI 6500 - Research in Educational Technology

Units: 4

Fundamental concepts in qualitative and quantitative research designs and program evaluation in Educational Technology. Statistical tools and procedures for data analysis and interpretation. Preparation of research proposal for project or thesis.

Prerequisites: EDUI 6400 or consent of instructor.

EDUI 6600 - Educational Interface Design

Units: 4

Current developments in cognitive science related to instructional technology. Human brain organization, the influence of environment upon memory and problem solving, how these issues can provide a foundation for progressive educational technology leaders. *Prerequisites: Consent of instructor.* Three hrs. lect., 2 hrs. lab.

EDUI 6741 - Family, School, Community Collaborations

Units: 4

Provides school administrators, teachers, psychologists, and counselors with a knowledge base for promoting family-community-school partnerships which will increase student academic success among ethnically, linguistically, culturally, and economically diverse populations. Participants examine ecological theoretical perspectives, engage in systemic analyses of real-world family-school-community relationships, and explore characteristics of effective family-school partnership programs.

EDUI 6755 - Cultural Diversity in the Workplace

Units: 4

Theory and practice for working with diverse populations in organizations and school settings. Communication across cultures, developing programs and practices, and valuing diversity in organization.

EDUI 6900 - Independent Study

Units: 1-4

EDUI 6909 - Departmental Thesis

Units: 2-5

Development and writing of a research paper (on a topic identified in EDUI 6500) submitted to Interdisciplinary Studies program faculty which specifies its format. Supervision by an Interdisciplinary Studies committee, at least one of whom must be a Cal State East Bay faculty member. Required presentation of thesis to program faculty and colleagues. *Prerequisites: EDUI 6500 and Advancement to Candidacy. Maximum of five units per student.*

EDUI 6910 - University Thesis

Units: 4-5

Developmental writing of a formal research paper on online teaching and learning for submission to the university in a specified format. Supervised by an EDUI committee, at least one of whom must be a Cal State East Bay faculty member. Defense normally required. *Prerequisites: EDUI 6701, EDUI 6702, EDUI 6703, and EDUI 6704, and graduate standing.*

EDUI 6999 - Issues in Education Interdisciplinary Studies

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in education interdisciplinary studies. May be repeated for credit when content varies, for a maximum of 8 units.

Education: Online Teaching and Learning

OTL 6701 - Introduction to Online Teaching and Learning

Units: 4.5

Design and delivery of online coursework with consideration of principles of teaching and learning, the virtual classroom, synchronous vs. asynchronous teaching and learning, copyright and fair use, accessibility, appropriate learning strategies in on-ground and online classes, potential for interactivity, and contrast between the principles and practices of on-ground and online teaching and learning.

OTL 6702 - Teaching Models for Online Instruction

Units: 4.5

Teaching models and their relationship to curriculum development, to student learning, to assessment, and to learning psychology. Special attention to the application of models of teaching to online instruction, different learning styles, various teaching and learning situations, needs of learners with accessibility issues, and limitations of current technologies. *Prerequisites: OTL 6701*

OTL 6703 - Technology Tools for Online Instruction

Units: 4.5

Design and construction of online environments for teaching and learning. Attention to platform, browser, system differences and limitations as well as to synchronous, asynchronous, and web-based delivery systems. Differences among online delivery providers, emphasis on maximum accessibility. *Prerequisites: OTL 6701 and OTL 6702.*

OTL 6704 - Designing Curriculum for Online Instruction

Units: 4.5

Incorporating on-ground and online teaching strategies and concepts into the design of an online course, including objectives, assignments, assessment, collaboration, participation, and course materials. Models of teaching and learning outcomes in on-ground and online courses. Practice in linking appropriate teaching models and designated learning outcomes with attention to differing learning styles. *Prerequisites: OTL 6701, OTL 6702 and OTL 6703.*

OTL 6705 - Educational Planning and Development for Online Programs

Units: 4.5

History of innovation in education and its effect on educational culture and thought. Organizational and managerial issues, problems, decision-making and solutions for successful implementation of online programs. Solutions to educational problems common to on-ground and online teaching environments as well as consideration of educational problems unique to online education such as intensive faculty development and support. *Prerequisites: OTL 6701, OTL 6702, OTL 6703 and OTL 6704.*

OTL 6706 - Research in Online Teaching and Learning

Units: 4.5

Research methods in education, both quantitative and qualitative, with attention to sources, collection, and uses of data. Critical analysis of research on online teaching and learning. Preparation of a research project to include references, rationale, and outline. Offered collaboratively with library staff. Satisfies the University Writing Skills. *Prerequisites: OTL 6701, OTL 6702, OTL 6703 and OTL 6704. Requirement only for M.S. Education, Option in Online Teaching and Learning Students if passed with a "B" or better.*

OTL 6707 - History and Culture of Online Learning Communities

Units: 4.5

The development of the cyberclassroom of today from both traditional distance learning correspondence courses and early networked virtual realities with attention to the history and culture of education. Evolution of on-ground and online teaching and learning roles, development of institutional responsibilities, and growth of degree, certificate, and enrichment programs.

Prerequisites: OTL 6701, OTL 6702, OTL 6703 and OTL 6704.

OTL 6772 - Content Development for Online Learning

Units: 4.5

Creating course materials specific to various learning environments: corporate, academic, military, industrial, enrichment, online and on-ground. Differences between training and education with emphasis on relevant teaching and learning strategies for each modality. Completion of online teaching components suitable to at least two different environments. *Prerequisites:* OTL 6701, OTL 6702, OTL 6703 and OTL 6704.

OTL 6773 - Supervising and Evaluating Online Teaching

Units: 4.5

Effective delivery of online materials within the context of educational theories of supervisory functions. Adaptation of techniques, including clinical supervision, for promoting and supporting teacher growth and development in the online environment. Online mentoring of new online teachers. *Prerequisites:* OTL 6701, OTL 6702, OTL 6703 and OTL 6704.

OTL 6774 - Current Issues in Online Learning

Units: 4.5

Controversies, problems, and promises of online teaching and learning, including examination of the role of gender, class, race in online teaching and learning, the potential impact of corporate influences on traditional educational paradigms, and the future of both online and on-ground education. *Prerequisites:* OTL 6701, OTL 6702, OTL 6703 and OTL 6704.

OTL 6780 - Building the Online Environment

Units: 4.5

Designing and implementing an online teaching site, including assignments, interactivity, contact protocols, syllabus, course materials, and research and development resources for student use. Presentation of materials in various formats including PDF, Shockwave, Flash, and HTML. *Prerequisites:* OTL 6701, OTL 6702, OTL 6703 and OTL 6704.

OTL 6781 - Creating Digital Media for Online Instruction

Units: 4.5

Making multimedia materials available in the online classroom with texts, images, sounds, videos, animations. Needs of students with accessibility challenges. *Prerequisites:* OTL 6701, OTL 6702, OTL 6703 and OTL 6704.

OTL 6782 - Designing and Implementing User Interfaces for Online Instruction

Units: 4.5

Using principles of user interface, audience analysis, discourse communities, and educational psychology to design online educational sites which reflect the needs of teachers, learners, and the global community. The effectiveness of colors, images, animations, and interactivity to facilitate communication with online students. Accessibility issues will be stressed. *Prerequisites:* OTL 6701, OTL 6702, OTL 6703 and OTL 6704.

OTL 6783 - Providing Interactivity in the Online Environment

Units: 4.5

Using latest and most sophisticated web resources to create learning environments that maximize interactivity, collaboration, document sharing, assessment, and access to multimedia materials. *Prerequisites:* OTL 6701, OTL 6702, OTL 6703 and OTL 6704.

OTL 6899 - Project

Units: 2-5

Development of an original product (teaching project, implementation plan, program evaluation proposal) which is identified in the research course and summarized in a written abstract. Both the project and the abstract are submitted to the program faculty which specify their formats. Supervision by a faculty committee, at least one of whom must be a Cal State East Bay faculty member. *Prerequisites: Advancement to Candidacy.*

Educational Leadership

EDLD 6000 - Introduction to Educational Leadership

Units: 4

Introductory seminar that includes legal, fiscal and administrative basis for school organization; leadership theories; the governance and relationship of local school districts with county, state, federal agencies and other political entities.

EDLD 6010 - Site Practicum I

Units: 2

Group supervision of a one-quarter field-based practicum focusing on the leadership roles of teachers in schools. Regularly scheduled seminars.

EDLD 6011 - Site Practicum II

Units: 2

Group supervision of a one-quarter field-based practicum focusing on the leadership skills needed by teacher leaders schools. Regularly scheduled seminars.

EDLD 6012 - Site Practicum III

Units: 2

Group supervision of a one-quarter field-based practicum focusing on teachers leading change processes in schools. Regularly scheduled seminars.

EDLD 6020 - Research in Education

Units: 4

Seminar in methods and procedures of research tools in education; sources and uses of data. Critical analysis of published research; preparation of a research project to include references, rationale, and outline.

EDLD 6025 - Research Practicum I

Units: 2

Group supervision of a one-quarter field-based practicum focusing on school site needs assessment. Regularly scheduled seminars. *Co-requisites: Concurrent enrollment in EDLD 6720.*

EDLD 6026 - Research Practicum II

Units: 2

Group supervision of a one-quarter field-based practicum experience in designing and using a variety of data collection methods. Regularly scheduled seminars. *Co-requisites: Concurrent enrollment in EDLD 6020.*

EDLD 6027 - Research Practicum III

Units: 2

Group supervision of a one-quarter field-based practicum experience emphasizing data analysis and presentation. Regularly scheduled seminars. *Co-requisites: Concurrent enrollment in EDLD 6908.*

EDLD 6124 - Teacher Leadership for Equity and Change

Units: 2

Examination of the roles and processes that teachers can lead in the school change process to address equity and race. Development of skills to analyze various forms of school measures to determine equity of results.

EDLD 6201 - Research Seminar

Units: 1

Research issues and methodology for school site inquiry. Online instruction, threaded conversations, and seminars will guide and extend individual research initiatives, establish critical review pairings, and focus master's cohort commentary on selected issues of research and school leadership. May be repeated two times for credit, for a maximum of 3 units.

EDLD 6400 - Instructional Leadership

Units: 4

Critical analysis of the nature of effective instruction for all students. Learning theories, teaching/learning styles, classroom management, assessing pupil progress, helping teachers meet individual and group needs, basic classroom observation techniques for instructional improvement, and laws affecting instruction.

EDLD 6410 - Supervision and Staff Development

Units: 4

Theory of supervisory functions. Survey of techniques that provide for staff development with emphasis on clinical supervision. Systematic planning and procedures in design and delivery of in-service training programs.

EDLD 6550 - School Site Leadership and Organizational Behavior

Units: 4

Basic operational tools and procedures for prospective principals. Situational analysis of administrative problems via application of behavioral science theories and concepts. *Prerequisites: Graduate standing and one year teaching experience.*

EDLD 6610 - Service-Learning for School Leaders

Units: 3

Designed to provide leaders with understanding of service learning teaching and strategies to manage and empower service learning in school sites and districts.

EDLD 6620 - Executive Communications for School Leaders

Units: 3

Writing skills to be assessed and developed include planning, drafting, editing, revising and presenting written communications (memos, letters, reports) to various audiences (faculty, parents, policy makers). The class will also examine, develop and present at least one targeted oral presentation. *A-F grading only.*

EDLD 6650 - Educational Law for Equity

Units: 4

Course Content: Legal aspects of school operation for beginning administrators. Overview of forces which shape legislative provisions; case law at local, state and national levels. District policy and practices related to law. Special focus is placed on examining the impact of legislations, public policy and case law on students by race, class, culture or language.

EDLD 6675 - School Finance and Human Resources for Equity

Units: 4

Fiscal aspects of school operation for beginning administrators. Overview of forces which shape school funding patterns at local, state and national levels. District policy and practices related to school finance. Special emphasis is placed on developing a vision and values that support the use of resources for equity as evidenced by equitable student outcomes.

EDLD 6720 - Solving School Problems through the Application of Research

Units: 4

Identifying and interpreting research, including action research, on specific school problems. Application of findings to solution of these problems. Influence of research, including action research, on educational practices. Required course to complete M.S. in Educational Leadership.

EDLD 6730 - School Administrators' Application of Computer Technology

Units: 3

Identification of school management issues which can be addressed through computer technology/software packages. Use of software packages for school administrative functions such as scheduling, budgeting, and attendance. Problem-solving practice.

EDLD 6770 - Group Facilitation for School Leaders

Units: 2

Major topics to be covered include: defining facilitation; examining tensions between facilitation and various forms of leadership; strategies for working effectively with small and large groups; practices for creating powerful conditions for team work; skills in creating and maintaining visual records; process strategies for guiding groups across a range of tasks.

EDLD 6801 - Fieldwork I

Units: 4

Supervised experiences in selected areas of administration/supervision, generally in a school setting, but other community agencies may be used. Regular reports and conference required. *CR/NC grading only.*

EDLD 6802 - Fieldwork II

Units: 4

Supervised experiences in selected areas of administration/supervision, generally in a school setting, but other community agencies may be used. Regular reports and conference required. *CR/NC grading only.*

EDLD 6803 - Fieldwork III

Units: 4

Supervised experiences in selected areas of administration/supervision, generally in a school setting, but other community agencies may be used. Regular reports and conference required. *CR/NC grading only.*

EDLD 6804 - Internship Fieldwork

Units: 6

Sequential supervised experiences in most areas of administration/supervision for candidates serving as part-time or full-time administrators on an Internship Credential. Regular reports and conferences required. *CR/NC grading only.*

EDLD 6805 - Internship Fieldwork

Units: 6

Sequential supervised experiences in most areas of administration/supervision for candidates serving as part-time or full-time administrators on an Internship Credential. Regular reports and conferences required. *CR/NC grading only.*

EDLD 6806 - Internship Fieldwork

Units: 6

Sequential supervised experiences in most areas of administration/supervision for candidates serving as part-time or full-time administrators on an Internship Credential. Regular reports and conferences required. *CR/NC grading only.*

EDLD 6814 - Internship Seminar

Units: 1

Intensive studies designed to help integrate each candidate's sequential internship fieldwork experiences with coursework and deal with issues common to initial administrative positions. *CR/NC grading only.*

EDLD 6815 - Internship Seminar

Units: 1

Intensive studies designed to help integrate each candidate's sequential internship fieldwork experiences with coursework and deal with issues common to initial administrative positions. *CR/NC grading only.*

EDLD 6816 - Internship Seminar

Units: 1

Intensive studies designed to help integrate each candidate's sequential internship fieldwork experiences with coursework and deal with issues common to initial administrative positions. *CR/NC grading only.*

EDLD 6817 - Assessment, Mentoring, and Support Practicum I

Units: 3

A two-year, advanced professional practicum sequence. Individual candidate assessment and planning for professional development. Design of individual professional growth and support plan with school district and university mentors, on-site visits and observations, and monthly colloquia. *Prerequisites: Consent of advisor. CR/NC grading only.*

EDLD 6818 - Assessment, Mentoring, and Support Practicum II

Units: 3

A two-year, advanced professional practicum sequence. Individual candidate assessment and planning for professional development. Design of individual professional growth and support plan with school district and university mentors, on-site visits and observations, and monthly colloquia. *Prerequisites: Consent of advisor. CR/NC grading only.*

EDLD 6819 - Assessment, Mentoring, and Support Practicum III

Units: 3

A two-year, advanced professional practicum sequence. Individual candidate assessment and planning for professional development. Design of individual professional growth and support plan with school district and university mentors, on-site visits and observations, and monthly colloquia. *Prerequisites: Consent of advisor. CR/NC grading only.*

EDLD 6822 - Practicum Seminar II

Units: 3

Group supervision of a one-year, advanced fieldwork practicum sequence. Regularly scheduled seminars, on-site visits, and observations with school district administrators and district and university mentors. Individual assessment and design of professional growth plan. *CR/NC grading only.*

EDLD 6823 - Practicum Seminar III

Units: 3

Group supervision of a one-year, advanced fieldwork practicum sequence. Regularly scheduled seminars, on-site visits, and observations with school district administrators and district and university mentors. Individual assessment and design of professional growth plan. *CR/NC grading only.*

EDLD 6831 - Assessment, Coaching and Support Practicum I

Units: 3

A two-year, advanced professional practicum sequence. Individual candidate assessment and planning for professional development. Design of individual professional growth and support plan with school district and university coaches, on-site visits and observations, and monthly colloquia. *Prerequisites: Consent of advisor. CR/NC grading only.*

EDLD 6832 - Assessment, Coaching and Support Practicum II

Units: 3

A two-year, advanced professional practicum sequence. Individual candidate assessment and planning for professional development. Design of individual professional growth and support plan with school district and university coaches, on-site visits and observations, and monthly colloquia. *Prerequisites: Consent of advisor. CR/NC grading only.*

EDLD 6833 - Assessment, Coaching and Support Practicum III

Units: 3

A two-year, advanced professional practicum sequence. Individual candidate assessment and planning for professional development. Design of individual professional growth and support plan with school district and university coaches, on-site visits and observations, and monthly colloquia. *Prerequisites: Consent of advisor. CR/NC grading only.*

EDLD 6860 - Developing an Inquiring Community

Units: 1

The first course in a three-quarter integrated series. Focus on developing community and inquiry methods such as action research. Based on five major themes: organizational and cultural environment; dynamics of strategic issues management; ethical and reflective leadership; analysis and development of public policy; management of information systems and human and fiscal resources. *Prerequisites: EDLD 6817, EDLD 6818, EDLD 6819 and consent of advisor.*

EDLD 6865 - Focus on Learning

Units: 1

The second course in a six-quarter integrated series. Focus on student, adult, and organizational learning. Based on five major themes: organizational and cultural environment; dynamics of strategic issues management; ethical and reflective leadership; analysis and development of public policy; management of information systems and human and fiscal resources. *Prerequisites: EDLD 6860 and consent of advisor.*

EDLD 6870 - Professional and Organizational Development

Units: 1

The third course in a six-quarter integrated series. Focus on the professional development of staff and parents and the development of communication and information systems in the school. Based on five major themes: organizational and cultural environment; dynamics of strategic issues management; ethical and reflective leadership; analysis and development of public policy; management of information systems and human and fiscal resources. *Prerequisites: EDLD 6865 and consent of advisor.*

EDLD 6875 - Political Social Context in Education

Units: 1

Focus on the role education leaders have influencing political, social, economic, legal and cultural context affecting education to improve education policies and practices. *Prerequisites: Consent of advisor. ABC/NC grading only.*

EDLD 6880 - Ethics and Integrity

Units: 1

Focus on issues of professionalism, ethics, integrity, justice and equity. Leadership students discuss the multiple stakeholders to whom they are responsible and strategies to support equitable student outcomes. *Prerequisites: Consent of advisor. ABC/NC grading only.*

EDLD 6885 - Managing an Organization and Developing a Collaborative Culture

Units: 1

Support education leaders in managing the organization to cultivate a safe and productive learning and working environment. Focus education leaders on strategies to shape a collaborative culture of teaching and learning informed by professional standards and focused on student and professional growth. *Prerequisites: Consent of advisor. ABC/NC grading only.*

EDLD 6899 - Project

Units: 2-5

Development of an original product which is summarized in a written abstract. Both the project and abstract are submitted to department, which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member.

EDLD 6900 - Independent Study

Units: 1-4

EDLD 6908 - Graduate Synthesis in Educational Leadership

Units: 4

Students synthesize their degree program experiences in coursework, fieldwork and research into a coherent framework for their own leadership role and plan their future professional development. Includes comprehensive exam.

EDLD 6909 - Departmental Thesis

Units: 2-5

Development and writing of a research paper for the submission to the department which specifies its format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense required.

EDLD 6910 - University Thesis

Units: 1-6

Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense required. (See also, "University Thesis Writing Guide," available in Student Services and Administration Building, Suite 4500.)

EDLD 6999 - Issues in Educational Leadership

Units: 1-4

Readings, discussion, and research on contemporary and/or significant issues in educational leadership. May be repeated for credit when content varies, for a maximum of 8 units.

Educational Leadership: Doctoral

EDLD 8000 - Values and Purposes of Educational Leadership

Units: 2

Introduction to the doctoral program, with a focus on the purposes of educational leadership, goals of schooling, and current issues. Personal reflection and self-assessment of individual values, goals, and commitments. *A-F grading only.*

EDLD 8010 - Applied Study of Educational Issues I

Units: 3

Guided experience working in field to identify and analyze a relevant educational issue. Opportunity for project work under the

direction of expert practitioner, including identification of knowledge gap or question of practice and formulation of a researchable focus. *A-F grading only.*

EDLD 8011 - Applied Study of Educational Issues II

Units: 2

Guided experience working in field to deepen leadership capacity related to specific area of practice. Opportunity for project work under the direction of expert practitioner, including integration into student's research focus. *A-F grading only.*

EDLD 8012 - Advanced Topics in Educational Leadership

Units: 3

Analysis and application of related literature on topical issues with broad implications for research and practice in educational leadership. *A-F grading only.*

EDLD 8020 - Leadership for Equity I

Units: 4

Socio-historical, socio-cultural, and social justice theories of addressing issues of diversity, equity and opportunity with a focus on underachieving populations and students of color. Leader's role and responsibility in developing evidence-based decision-making cultures that promote student achievement. *A-F grading only.*

EDLD 8021 - Leadership for Equity II

Units: 4

Advanced work with theories of social justice and equity, as well as data related to achievement gaps between White and Asian groups of students and Blacks and Hispanics. Leader's role in mobilizing and utilizing resources to dismantle patterns of inequity and exclusion. *A-F grading only.*

EDLD 8030 - Leadership in Systemic Reform

Units: 4

Concepts of individual and group leadership in educational institutions. Practices and policies of improving academic achievement and sustaining reform efforts in public schools. *A-F grading only.*

EDLD 8031 - Schools as Organizations: Linking Theory and Practice

Units: 4

Introduction to organizational theory as it applies to school systems; implications of technical/rational, human resource, and open systems perspectives; cultural and institutional theory as emerging analytic tools; implications for organization, management, leadership, and reform. *A-F grading only.*

EDLD 8032 - Sustainability of Educational Reform

Units: 4

Models and complexities of organizational reform; theoretical frameworks, concepts and analysis of dimensions of sustainability; the equitable and ethical sustaining of organizational programs focusing on the underachieving students; complex models of educational change; impacting entrenched organizational-cultural patterns; facilitating collaborative change. *A-F grading only.*

EDLD 8040 - Program Planning and Evaluation

Units: 4

Development of conceptual frameworks for evaluating systems to improve educational programs, educational systems, and educational policymaking. Integration of analytical and retrospective case studies that influence learning outcomes, student interventions and program improvement. *A-F grading only.*

EDLD 8041 - Leadership for Educational Accountability

Units: 4

Theoretical and analytical basis of school accountability systems; demonstrable effective organizational arrangements leading to equitable student outcomes; internal and external accountability processes and their use in data-driven planning. *A-F grading only.*

EDLD 8050 - Leadership in Curriculum and Instructional Reform

Units: 4

Theories and practices of curriculum and instruction in diverse school settings. Theories of cognition, learning, assessment and professional development for organizing schools around participation of diverse communities and cultures. *A-F grading only.*

EDLD 8060 - Leadership in Resource Management

Units: 4

Financing public education; acquisition and management of human, fiscal, information resources; equitable assets to effectively manage public education institutions; financial management, human resources and resolution of conflict. *A-F grading only.*

EDLD 8070 - Governance, Law and Policy Development

Units: 4

Public education policy development; forces that shape legislative provisions; legal frameworks for operating public schools in CA; legal ramifications of district policy and practices and their impact on leadership; case law at multiple levels and by race, class, culture, and language; community and governmental relations; working with boards and trustees, families, communities, businesses, local, state, and federal governmental agencies. *A-F grading only.*

EDLD 8071 - Governance and Policy Development

Units: 4

Distributed leadership in democratic schools; application of governance and policy tools in support of access and equity; dismantling institutional racism. *A-F grading only.*

EDLD 8080 - Conceptual Foundations of Research

Units: 4

Overview of research theory and design in multiple fields that influence educational policy and practices. Introduction to knowledge construction in socio-economic, community, political, and disciplinary contexts. *A-F grading only.*

EDLD 8081 - Qualitative and Quantitative Methods A

Units: 4

Examine theories of qualitative and quantitative research design. Explore uses, design and techniques of qualitative and quantitative research methodologies. Explore the appropriateness of research theories and methods in specific contexts. *Prerequisites: Admission to the Educational Leadership Doctoral Program; EDLD 8080. A-F grading only.*

EDLD 8082 - Qualitative and Quantitative Methods B

Units: 4

Continued examination and application of theoretical approaches to qualitative and quantitative research design. Refinement of related research skills and use of relevant tools. Identify appropriateness of research theories and methods in specific contexts. *A-F grading only.*

EDLD 8083 - Defining Educational Issues

Units: 4

Application of multidisciplinary theory in selection and definition of educational questions. Review of literature for specific educational issues. Initial design of an in-depth study of an educational issue. *A-F grading only.*

EDLD 8084 - Applied Research Methods A

Units: 4

Application of foundational coursework in research to the design of an in-depth study of an education issue. Includes literature review, research design and methodology from ethical and theoretical perspectives. Assess and apply appropriate research methods in collection, analysis and synthesis of data. *A-F grading only.*

EDLD 8085 - Applied Research Methods B

Units: 4

Application of foundational coursework in research to the design of an in-depth study of an education issue. Includes literature review, research design and methodology from ethical and theoretical perspectives. Assess and apply appropriate research methods in collection, analysis and synthesis of data. *A-F grading only.*

EDLD 8086 - Dissertation Seminar

Units: 4

Develop a dissertation proposal that defines an educational policy and practices within a particular community; reviews professional literature from multiple disciplinary perspectives; and, designs an appropriate research methodology (including data collection tools) to study the issue. *A-F grading only.*

EDLD 8087 - Dissertation Studies

Units: 3

Ongoing, supported advising on dissertation study data collection, data analysis and reporting. May be repeated for credit for a maximum of 12 units. *A-F grading only.*

EDLD 8900 - Independent Study

Units: 2-4

Interest- and needs-based seminars for small groups of candidates on topics related to dissertation development including (but not limited to): developing a literature review; completing Institutional Research Board processes and forms; advanced statistical analyses; etc. May be repeated for credit for a maximum of 8 units. *A-F grading only.*

Educational Psychology

EPSY 1001 - Career Planning for College Students

Units: 2

For students who are unclear about their career goals. Discussion, individual and small group activities designed to increase students' self-knowledge in terms of interests, abilities, and values, as well as information about the world of work and effective decision making techniques. *CR/NC grading only. Approved to satisfy GE Area F.*

EPSY 1020 - The Helping Relationship

Units: 4

Basic skills, attitudes, and resources necessary for non-licensed positions in the helping professions. Students will practice basic attending and responding skills, and gain insight into their own values, reaction patterns, and interpersonal styles. Not open to students with credit for EPSY 3000. *A-F grading only.*

EPSY 2300 - Strategies for Lifespan Mental Health

Units: 4

Utilizing theory and research from mental health disciplines to develop strategies for maintaining psychological health and peak performance over the lifespan. The impact of relationships, self-concept, cognitions, emotions, spirituality, body image, and diverse cultural identities on mental health.

EPSY 3001 - Orientation to Careers in Counseling

Units: 4

Overview of counseling profession and different types of employment using counseling skills through self awareness activities; assists students with career/major choices. Survey of careers regarding counseling and skills required for marriage and family, career, school, rehabilitation and substance abuse counseling. *A-F grading only.*

EPSY 3555 - Introduction to Education for Social Justice

Units: 4

Exploration of education in a democratic society, and how social justice concerns have influenced efforts to promote equality, excellence, and social responsibility in schools. Designed for undergraduates interested in careers in the education helping professions. Primary focus will be learning about collaborative guidance interventions and programs that promote resilience and success for all students. *Prerequisites: Upper Division Standing.*

EPSY 3999 - Issues in Educational Psychology

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in educational psychology.

Educational Psychology: Graduate

EPSY 5021 - Introduction to Educating all Students in Diverse Classrooms

Units: 4

Basic concepts, issues and best practices in special/general education, and the development of curriculum and instructional strategies to address diverse student needs (including disabilities) in general education settings. *A-F grading only.*

EPSY 5125 - Educational Practices: Mild-Moderate Disabilities

Units: 4

Methods, materials, media and technology that enhance the learning process of students with mild-moderate disabilities. Teaching such students from diverse cultural, linguistic, and ethnic backgrounds in special and general education settings.

EPSY 5126 - Special Education Law and Program Design

Units: 4

Laws and regulations that affect the lives of individuals with disabilities and their families. These laws and regulations relate to program design, program evaluation, family involvement, and the overall IEP process.

EPSY 5136 - Educational Practices: Moderate-Severe Disabilities

Units: 4

Inclusive educational practices for students with moderate-severe disabilities and the philosophical, theoretical and technological foundation required for implementation of curriculum and methodology, and the basis for curriculum design.

EPSY 5610 - Microcounseling I

Units: 2

Development and practice of the basic skills of counseling, especially the skills of listening. Use of brief videotaped counseling sessions ("microcounseling"). Students will role-play to observe, analyze, and evaluate techniques of counseling.

EPSY 5620 - Microcounseling II

Units: 2

Development of the counselor's ability to influence others. Use of brief videotaped counseling sessions ("microcounseling"). Students will role-play to observe, analyze, and evaluate techniques of counseling.

EPSY 5900 - Independent Study

Units: 1-4

EPSY 6021 - Thesis-Project Seminar (Mild-Moderate Disabilities Option)

Units: 3

Culminating course for the M.S. Special Education, Mild Moderate Disabilities Option, Supervision of project or thesis. May be repeated once for credit, for a maximum of 6 units.

EPSY 6023 - Research in Applied Behavioral Sciences

Units: 4

Survey of research philosophy and methods for conducting studies in settings employing counselors, educators, and psychologists.

EPSY 6025 - Psychopathology of Childhood

Units: 4

Seminar in developmental psychopathology; advanced case study, differential diagnosis, assessment procedures, treatment and placements.

EPSY 6026 - Psychopathology in Adulthood

Units: 4

Theoretical and clinical approaches to conceptualization, differential diagnosis, and assessment of psychopathology through adulthood. Application of theories of psychopathology to counseling and psychotherapy.

EPSY 6027 - Chemical Dependence Theory

Units: 4

Theory and research relating to chemical dependence as a variable in counseling. Focus on concepts of dependence, the disease model, identification, assessment, and family dynamics. Covers addiction to alcohol and other mood altering chemicals.

EPSY 6029 - Seminar in Chemical Dependency

Units: 2

Survey of concepts of alcoholism and other chemical substance dependency. Assessment and treatment modalities applied to addictive disorders.

EPSY 6120 - Communication: Collaborative Teaming and Management

Units: 4

Development of collaborative consultation, communication, teaming and problem-solving skills necessary for the coordinated delivery of educational services for students with disabilities.

EPSY 6124 - Augmentative Communication and Assistive Technology

Units: 4

Hardware, software, and web-based applications and strategies for accessing and integrating technology with universal design principles. Legal, ethical, and policy issues in technology use. Role of technology in collaborative team-based assessment for individualized assistive technology and augmentative communication use across the life span.

EPSY 6127 - Instruction and Behavioral Support: Mild-Moderate Disabilities

Units: 4

Specific instructional and curriculum strategies. Positive behavioral support interventions that enhance the teaching/learning process for mild-moderate and at-risk students from diverse cultural, linguistic and/or ethnic backgrounds.

EPSY 6128 - Instructional and Behavioral Support Fieldwork

Units: 4

Fieldwork reinforcing the skills, abilities, and strategies introduced specifically in EPSY 6127. *Co-requisites: Concurrent enrollment in EPSY 6127.*

EPSY 6129 - Advanced Study in Collaborative Service Delivery, Education, and Transition

Units: 4

Facilitates Level II candidates' advanced skill development in leadership, cross-cultural communication, professional development collaboration and networking across transdisciplinary teams with educators and community agencies. Teamwork throughout critical transition periods, interagency service coordination, school reform models, effective transition within diverse restructured and inclusive schools.

EPSY 6130 - Service Learning and Positive School Climate

Units: 4

Knowledge and skills for creating and implementing service learning projects within school and community settings. Connection to core curriculum, building academic and social skills and development of a positive school climate. Requires fieldwork for service learning project.

EPSY 6131 - Assessments: Students with Mild-Moderate Disabilities

Units: 4

Issues, policies, approaches and methods relevant to the assessment of students with mild to moderate disabilities for the purpose of determining knowledge, skills and abilities as well as needs. Formal and informal methods of academic, interest, social and behavioral assessments. Ethical and legal considerations. Advocacy for responsible practices.

EPSY 6133 - Curriculum: Students with Mild-Moderate Disabilities

Units: 4

Reinforce and enhance already existing skills, abilities and knowledge of instructional procedures, technology, positive behavioral approaches and curriculum development employed with mild-moderate and at-risk students from diverse cultural, linguistic, and/or ethnic backgrounds.

EPSY 6134 - Advanced Curriculum and Instruction: Mild-Moderate Disabilities

Units: 4

Advanced knowledge and practices in assessment, curriculum, and instruction for supporting students with mild-moderate disabilities in school, home and community settings. Emphasis on data based decisions, use of research and evidence based practices in curriculum and instruction.

EPSY 6137 - Instructional and Behavioral Support: Moderate-Severe Disabilities

Units: 4

Techniques for developing and implementing effective instruction for students with moderate to severe disabilities. A variety of assessment, classroom management and positive behavioral support strategies which provide the basis for instruction to meet the individual needs of a diverse population of learners. *Co-requisites: Concurrent enrollment in EPSY 6860.*

EPSY 6140 - Curriculum: Students with Moderate-Severe Disabilities

Units: 4

Curriculum and instruction for basic skill development across motor, communication, social behavior, and academic areas. Infusion of skills within functional activities.

EPSY 6141 - Social Networks and Communication for Students with Autism Spectrum Disorders (ASD) and Other Disabilities

Units: 4

Learning and social characteristics of students with ASD, along with evidence-based strategies to teach specific communication and social skills. Including: techniques and materials to improve communication abilities and to develop rich social networks in inclusive schools.

EPSY 6142 - Assessment: Students with Moderate-Severe Disabilities

Units: 4

Issues, purposes, and methods relevant to the assessment of students with moderate to severe disabilities for educational programming, including appropriate selection and interpretation of a variety of assessment approaches. Ethical and legal considerations. Advocacy for responsible practices.

EPSY 6143 - Positive Behavior Supports

Units: 4

Knowledge and skills in developing and implementing comprehensive, function-based positive behavioral supports. Basic applied behavior analysis principles and functional assessment of behavior. Variety of educational and positive intervention strategies. School-wide systems for positive, respectful discipline and student support.

EPSY 6144 - Inclusive Education: School and Community

Units: 4

Strategies for including students with severe disabilities in integrated school and community settings. Emphasis on functional programming and interactions and friendships with non-disabled peers, with practical applications in local schools.

EPSY 6145 - Advanced Studies in Adolescent Learning and Secondary Curriculum

Units: 4

Provides Level II candidates with specialized competencies and experiences beyond the basic program focusing on the adolescent/adult with mild-moderate-severe disabilities. Includes instruction, transition, social supports, and secondary curricula with school to work and career emphasis.

EPSY 6200 - Grief Counseling

Units: 2

The unique problems and situations of people facing loss, grief, and bereavement. Emotional reactions to death and loss. Counseling strategies based on stress reduction and the development of positive resolutions.

EPSY 6201 - Marketing Psychological Services

Units: 2

The process of planning, implementing, and marketing psychological skills in a business or private practice. Topics include defining deliverables, customers, selling cycles, pricing, and market strategy.

EPSY 6202 - Parents and Professional Relations

Units: 2

Knowledge and skills needed for effective interaction with parents of students with special needs. Familiarity with the legal basis, current research and practices related to parent involvement in special education.

EPSY 6203 - Inclusive Education Seminar

Units: 2

Advanced knowledge and hands-on skills for teachers delivering instruction within inclusive general education classrooms and school communities. Field experiences focusing on specific issues in inclusive education.

EPSY 6205 - Advanced Pupil Personnel Specialist

Units: 4

Advanced professional preparation in the theory and practice of pupil personnel services. *CR/NC grading only.*

EPSY 6206 - Advanced Studies in the Education of Students with Mild-Moderate Disabilities: Research and Professional Practice

Units: 4

Research and best practices for providing services to students with mild-moderate disabilities within school, home and community settings. Transitions across the lifespan, case management, and local, state, national and professional policies and legislation.

EPSY 6207 - Advanced Studies in the Education of Students with Moderate to Severe Disabilities: Research and Professional Practice

Units: 4

Skills in case management, ethical professional practices, the analysis and synthesis of pedagogical and research foundations, as well as in policy and legislations which inform best practice in the education of students with moderate-severe disabilities.

EPSY 6301 - Pediatric Psychology

Units: 4

Clinical issues in the growth and maturation of cognition, psychomotor performance, and ego development; anomalies of development and integration and related problems of social-emotional adjustment. Emphasis on the period of infancy and childhood.

EPSY 6302 - Individual Development

Units: 4

Theory and research covering individual growth over the life span. Emphasis on the interaction of biological and social factors and their psychological consequences, especially as to definition of normal crises and related levels of therapeutic intervention.

EPSY 6400 - Family Psychotherapy

Units: 4

Discussion and activities in psychotherapeutic techniques. Theory and research dealing with family interaction and communication. Diagnostic and intervention methods for dysfunctional family systems.

EPSY 6402 - Couples Therapy

Units: 4

Theory and techniques of counseling clients in couples, with an emphasis on spousal relationships. Assessment and treatment planning with issues of communication, intimacy, sexuality, goals, domestic violence, marriage, and divorce.

EPSY 6403 - Psychotherapy for Children

Units: 4

Introduction to the theories, research and techniques of psychotherapeutic assessment and treatment of children. Activities include class involvement in psychotherapy methods.

EPSY 6406 - Seminar in Human Sexuality

Units: 2

Physiological, psychological, social and cultural variables as they affect sexual identity, sexual behavior and sexual disorders. Clinical treatment of sexual problems.

EPSY 6500 - Cognitive Behavior Therapy

Units: 4

Principles and practice of cognitive and behavior therapies, including meta models and transformational linguistics of communication theories. Emphasis on possibilities for integrated therapeutic approach.

EPSY 6550 - Young Children with Special Needs

Units: 4

Survey of disabilities served under federal law with an emphasis on young children. Risk and protective factors related to early intervention. Introduction to the Individual Family Services Plan and Individualized Education Program processes. Ten hours of required fieldwork.

EPSY 6551 - Family systems and Cultural Competence in ECSE

Units: 4

Family Systems Model and cultural competence in the Early Childhood Special Education. Culturally sensitive methodologies; parent-child interactions; intervention processes. Ten hours of required fieldwork.

EPSY 6552 - Assessment and Intervention Planning for Young Children with Special Needs

Units: 4

Assessment of young children (birth to 5). Formal and informal methodologies. Translation of results to individualized goals and objectives. Ten hours of required fieldwork.

EPSY 6553 - Curriculum and Instruction n ECSE

Units: 4

Curriculum and instruction for young children with special needs. Inclusive and self-contained ECSE environments. Inter-agency and family collaboration. Ten hours of required fieldwork.

EPSY 6600 - Clinic Rounds

Units: 3

Regularly scheduled seminar with Director of Community Counseling Center. Discussion of procedures, good practices, assignment of cases, and Center ethics, rules, responsibilities. Required of all graduate students assigned as trainees to the Center. May be repeated for credit for 3 units per quarter for 6 quarters or 18 units total. *CR/NC grading only.*

EPSY 6610 - Graduate Seminar I

Units: 2

Introductory considerations of application of theory and current research to professional settings; problems in use of professional techniques and methods.

EPSY 6620 - Graduate Seminar II

Units: 2

Introductory considerations of application of theory and current research to professional settings; problems in use of professional techniques and methods.

EPSY 6630 - Graduate Seminar III

Units: 2

Introductory considerations of application of theory and current research to professional settings; problems in use of professional techniques and methods.

EPSY 6669 - Seminar in Mental Health Consultation

Units: 3

Theory and techniques of mental health consultation. Consideration of institutional and group factors as they affect and condition the adjustment problems of individuals. Techniques and strategies available to psychologists for affecting changes in the mental health climate of schools. Prerequisite: Coursework in advanced fieldwork, with consent of advisor.

EPSY 6670 - Field Work Group Supervision I

Units: 3

Group supervision of assigned field work. *CR/NC grading only.*

EPSY 6671 - Field Work Group Supervision II

Units: 3

Group supervision of assigned field work. *CR/NC grading only.*

EPSY 6672 - Field Work Group Supervision III

Units: 3

Group supervision of assigned field work. *CR/NC grading only.*

EPSY 6700 - Advanced Education Psychology

Units: 4

Systematic analysis of general principles of motivation and learning as applied to educational processes.

EPSY 6701 - Appraisal Procedures: Standardized

Units: 4

Seminar in measurement theory applied to the development and evaluation of standardized tests used in counseling. Activity includes administration and supervision of above instruments.

EPSY 6711 - Career-Life Planning

Units: 4

Career-Life planning counseling techniques; information sources; development of career libraries and centers, employability development techniques; activities involving observation and participation in career counseling and information.

EPSY 6720 - Theory and Assessment of Cognition

Units: 4

Concepts of intelligence and their use in mental Seminar in measurement theory applied to the development and evaluation of standardized tests used in counseling. Activity includes administration and supervision of above instruments. Major types of individually administered intelligence tests, their uses, and interpretation.

EPSY 6746 - Neuropsychology of Learning Disabilities

Units: 4

Diagnosis and rehabilitation of learning disabilities emphasizing a neuropsychological approach.

EPSY 6750 - Foundations of Counseling

Units: 4

The principles and concepts of counseling, including communication dynamics, intervention techniques, and development of a personal theory of counseling.

EPSY 6751 - Counseling and Psychotherapy Theory

Units: 4

Examination of current theories of counseling and psychotherapy; development of individual counseling approach.

EPSY 6752 - Cross-Cultural Counseling

Units: 4

Focus on cross-cultural counseling and psychotherapy, cultural values and personality formation; value orientation inherent in counseling and psychotherapy; psychological effects of cultural racism; effects of sex roles and life styles within different cultures.

EPSY 6754 - Cross-Cultural Consultation

Units: 4

Consultation with schools, agencies, institutions concerning emotional issues in mixed cultural/ethnic situations. Clinical application of current theories, research in counseling and psychotherapy. Reading, examination of case materials.

EPSY 6758 - Practicum in Counseling

Units: 3

Introductory learning experience to prepare graduate students for professional counseling in clinical settings. Students will receive information, practice, counseling skills and develop a professional perspective. May be repeated once for credit, for a maximum of 6 units.

EPSY 6762 - Group Procedures and Facilitation

Units: 4

Theories, principles of group dynamics and processes facilitating individual, small group, and organizational change. Interpersonal skills in group process. Clinical analysis of actual group experiences. Not open to students with credit for PUAD 6762.

EPSY 6764 - Intervention Strategies for Systems and Organizational Change

Units: 4

Facilitator's role in organizational, systems change: schools, agencies, industry. Diagnosis, intervention strategies for planned or indirect organizational, systems change. Actual experience with intervention models, case problems. Not open to students with credit for PUAD 6764.

EPSY 6765 - Psychological and Counseling Services in Schools and Higher Education

Units: 2

The administration and organization of psychological and counseling services in the schools and higher education: concepts, responsibilities, and functions of the psychologist, counselor and student support services. Different sections will focus on K-12 or higher education. May be repeated once for credit, for a maximum of 4 units.

EPSY 6766 - Personal/Social Counseling in Schools

Units: 2

Integration, implementation, and evaluation of the American School Counselor Association (ASCA) National Standard's Personal/Social domain of a comprehensive school counseling program. Such programs are designed to meet the learning needs of all students, identify barriers to success, and increase learning power with enhanced activities. *A-F grading only.*

EPSY 6767 - Academic Counseling in Schools

Units: 3

Academic domain course for graduate study in school counseling. Oriented toward school counselors-in-training with emphasis on theoretical and practical aspects of comprehensive school counseling programs. Concentration on facilitation and development of school counseling program, and how school counselors support the learning of all students. Field study required. *A-F grading only.*

EPSY 6768 - Foundations of School Counseling

Units: 4

Foundational course for graduate study in school counseling. Oriented toward professionals-in-training with an interest in the special and unique field of school counseling. Emphasis on both theoretical and practical aspects of comprehensive school counseling program development. Field study required. *A-F grading only.*

EPSY 6770 - Internship

Units: 2-6

Individually supervised experience in a professional setting utilizing the full range of competencies in the student's concentration. May be repeated two times for credit, for a maximum of 18 units.

EPSY 6775 - Community Mental Health Counseling

Units: 4

Community mental health theories and skills. Including recovery orientated treatment for severe mental illness, disaster and trauma response, services for impoverished and homeless persons, foster-care, case management, client advocacy, collaboration, community service resources, and medical family therapy. *Prerequisites:* M.S. Counseling graduate student or consent of instructor. A-F grading only.

EPSY 6783 - Seminar: Contemporary Issues

Units: 2-3

Seminar in theoretical, research, and counseling approaches concerning special issues and populations, such as delinquents, drug users, aged, the poor. May be repeated two times for credit when content varies, for a maximum of 9 units. Offered as two- or three-hour seminar.

EPSY 6784 - Pharmacology and Counseling

Units: 3

Utilization of theory and research from the psychiatric and psycho-pharmacological disciplines to increase counselors' knowledge of the medical treatments for psychiatric disorders. Overview of medications prescribed for children and adults with psychological and developmental disorders. The interface between psychotherapy and these medications.

EPSY 6785 - Law and Ethics in Counseling

Units: 3

Professional ethics and statutory, regulatory and decisional laws currently applicable to the practice of counseling and psychotherapy. Confidentiality, mandated reporting laws, family and child laws as they affect clinical practice. The relationship between a counselor's personal values and his or her professional behavior and ethics.

EPSY 6786 - Child Abuse Assessment

Units: 1

Legal and clinical aspects of child abuse as an issue in counseling and psychotherapy practice. Child abuse reporting laws and procedures, the psychological and family system variables important in assessment, and both individual and family treatment strategies. *CR/NC grading only.*

EPSY 6788 - Spousal/Partner Abuse

Units: 2

Detection, assessment, and diagnosis of spousal or partner abuse. Clinical issues regarding emotional abuse and violence in domestic relationships. Interventions for the treatment of couples in abusive relationships.

EPSY 6810 - Advanced Graduate Seminar I

Units: 2

Relationship of theory and current research to professional practice; consideration of ethical and legal principles, socio-cultural issues, and research techniques in professional settings.

EPSY 6820 - Advanced Graduate Seminar II

Units: 2

Relationship of theory and current research to professional practice; consideration of ethical and legal principles, socio-cultural issues, and research techniques in professional settings.

EPSY 6830 - Advanced Graduate Seminar III

Units: 2

Relationship of theory and current research to professional practice; consideration of ethical and legal principles, socio-cultural issues, and research techniques in professional settings.

EPSY 6860 - Advanced Fieldwork I

Units: 2-4

Individual supervision of assigned field work. *CR/NC grading only.*

EPSY 6862 - Advanced Fieldwork II

Units: 2-4

Individual supervision of assigned field work. *CR/NC grading only.*

EPSY 6870 - Advanced Field Work Group Supervision I

Units: 3

Group supervision of assigned field work. *CR/NC grading only.*

EPSY 6871 - Advanced Field Work Group Supervision II

Units: 3

Group supervision of assigned field work. *CR/NC grading only.*

EPSY 6872 - Advanced Field Work Group Supervision III

Units: 3

Group supervision of assigned field work. *CR/NC grading only.*

EPSY 6880 - Advanced Internship

Units: 2-15

Individually supervised experience in a professional setting utilizing the full range of competencies in the student's concentration. May be repeated two times for a maximum of 45 units. *CR/NC grading only.*

EPSY 6898 - Cooperative Education

Units: 1-4

Supervised work experience in which students complete academic assignments integrated with off-campus paid or volunteer activities. May be repeated once for credit for a maximum of 8 units. *CR/NC grading only.*

EPSY 6899 - Project

Units: 2-5

Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense may be required.

EPSY 6900 - Independent Study

Units: 1-4

EPSY 6909 - Departmental Thesis

Units: 2-5

Development and writing of a research paper for submission to the department which specifies its format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally is required.

EPSY 6910 - University Thesis

Units: 1-9

Development and writing of a formal research paper for submission to the University in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense is normally required. (See also, "University Thesis Writing Guide," www.csueastbay.edu/thesiswritingguide.)

EPSY 6911 - Developmental Assessment Practicum

Units: 4

Clinical practice under supervision with individually administered tests.

EPSY 6912 - Personality Assessment

Units: 4

Study of instruments and procedures commonly employed in clinical study of emotional and social adjustments.

EPSY 6999 - Issues in Educational Psychology

Units: 2

Readings, discussion, research, and applications on contemporary and/or significant issue in Educational Psychology. May be repeated 5 times for credit when content varies, for a maximum of 12 units.

Engineering

ENGR 1011 - Engineering: An Introduction

Units: 3

Introduction to engineering profession and creative engineering problem-solving through hands-on design projects, presentations, and activities. An introduction to various engineering disciplines. Issues such as sustainability, optimal use of resources, design for manufacturability, design for reuse and logistics are considered. Work in engineering-related writing, both in-class and online, with emphasis upon effective preparation of written research in the field. Two hrs. lect.; 2 hrs. lab.

ENGR 1420 - Engineering Graphics

Units: 2

Engineering drawing, computer-aided design, dimensioning, and tolerancing. Drawings of mechanical components. One hr. lect., 3 hrs. lab.

ENGR 1810 - Pre-Columbian Engineering and Construction Technology

Units: 4

An exploration of the engineering advances, technology, and construction techniques by pre-Columbian cultures in North, Central and South America. Applied analysis of relevant engineering principles developed by pre-Columbian cultures and their past and present technological and environmental impact. Not for Engineering major/minor credit. *Satisfies GE Area: B1, Physical sciences; B5, Science elective.*

ENGR 2010 - Electric Circuit Theory I

Units: 3

Application of fundamental circuit laws and theorems to the analysis of DC and to steady-state single-phase and three-phase circuits. *Prerequisites: PHYS 1002 (may be taken concurrently).* 2 hours Lecture/ 3 hours Lab

ENGR 2060 - Materials Science

Units: 4

Structure of matter. Physical and mechanical properties of materials, including metals, alloys, ceramics, insulating materials, semiconductors, super semiconductors, and polymers. Equilibrium diagrams. Heat treatments, material selection, and corrosion phenomena. *Prerequisites: CHEM 1101 and MATH 1304.* Three hrs. lect., 3 hrs. lab.

ENGR 2070 - Fundamentals of Manufacturing

Units: 4

Traditional and non-traditional manufacturing processes. Cutting tool analysis. Production methods. *Prerequisites: ENGR 1011 and ENGR 2060.*

ENGR 2430 - Computer Organization and Assembly Language Programming

Functional organization of digital computers and programming in machine and assembly language. Internal representation of data, binary arithmetic, machine instructions, addressing modes, subroutine linkage, macros. Introduction to assemblers, linkers, and loaders. *Prerequisites: Department permission required.*

Engineering: Graduate

ENGR 5180 - Product/Process Design

Units: 4

Investigation of the product and process design cycle as a source of competitive advantage. Topics include functional maps, aggregate planning, cross-functional integration, design for manufacturability, and the design-build-test cycle. Case studies and site visits used extensively to reinforce concepts presented in lectures and reading assignments.

ENGR 5200 - Systems Simulation

Units: 4

Design and analysis of manufacturing and service systems by simulation. Function of random variables. Random number and function generators, programming and characteristics of simulation languages.

ENGR 5280 - Design and Management of Human Work Systems

Units: 4

Qualitative principles and techniques used to maximize labor productivity, employee satisfaction, and organizational performance in work settings. Topics include worker motivation and incentive systems, leadership, worker autonomy, work groups and participatory organizational structures including quality control circles, total productive maintenance teams, and socio-technical systems.

ENGR 5300 - Quality Engineering

Units: 4

Quality control, reliability, maintainability, and integrated logistic support. Statistical theory of process control and sampling inspection. Risks associated with decisions based on operating characteristics of control charts and sampling plans. Reliability and life testing methods. Economics of statistical QC. Cross-listed STAT 5300.

ENGR 5601 - Introductory Statistics and Probability for Science and Engineering

Units: 4

(See STAT 5601 for course description.)

ENGR 6090 - Economic Decision Systems

Units: 4

Course Content: Economic evaluation of information for complex decisions. Analysis of risks and uncertainties. Bayes theory and models. Decision theory, sequential decisions, and value of information applied to financial evaluation and control. Major project justification procedures. Not open to students with credit for ENGR 4090. *A-F grading only.*

ENGR 6150 - Production Planning and Control

Units: 4

Inventory planning and control systems. Implementation of manufacturing resource planning including demand forecasting, production planning, master scheduling, bill-of-material, and inventory master file. Capacity requirements planning and shop floor control. Project management. Not open to students with credit for ENGR 4100. *A-F grading only.*

ENGR 6200 - Project Management

Units: 4

Application of project management from both strategic and operational points of view. Quantitative methods such as project

planning, budgeting, evaluation, selection, scheduling and control are demonstrated by using MS project via PERT/CPM. Early identification of potential problems, with implementation of alternative solutions and risk management. *A-F grading only.*

ENGR 6300 - Applied Quality Assurance

Units: 4

Application of quality engineering and management techniques during the design and improvement of processes and procedures. Topics include the application of statistical and optimization techniques used for process improvements. Design of Experiments (DOE), multivariate regression, and quality improvement techniques such as Six Sigma will be presented. Cross-listed STAT 6300.

ENGR 6350 - Reliability Engineering

Units: 4

Reliability concepts and mathematical models, mechanical device reliability, electrical device reliability, systems reliability and maintainability, reliability data, assurance program elements. Not open to students with credit for ENGR 4350. *A-F grading only.*

ENGR 6400 - Research Methods in Engineering Management

Units: 4

An application-oriented course with emphasis on quantitative techniques in engineering management. Topics include: decision-making under uncertainty, risk analysis, network analysis such as PERT and CPM, multi-criteria decision-making and cost optimization.

ENGR 6420 - Systems Modeling

Units: 4

Integration, problem identification, and the application of problem resolution techniques in manufacturing and service domains. System approach to problem identification, description, modeling, and resolutions derived by traditional optimization techniques as well as artificial intelligence methods. Supply chain modeling methods, logistics support analysis, procurement, and outsourcing strategies. *A-F grading only.*

ENGR 6430 - Facilities Planning and Design

Units: 4

Design concepts and input requirements in planning and design of new, or renovation of, existing manufacturing systems. Product, process, and flow and activity analysis techniques. Flow lines and buffering techniques. Computer-aided layout design and evaluation. Design of handling systems. Math models of location problems. Not open to students with credit for ENGR 4430. *A-F grading only.*

ENGR 6440 - Computer Integrated Manufacturing Systems

Units: 4

Introduction to automation, computer aided manufacturing, group technology, computer aided process planning, cellular manufacturing, just-in-time manufacturing, Push and Pull Manufacturing Systems, and production control. *A-F grading only.*

ENGR 6899 - Project

Units: 1-4

Completion of a research or applied project, accompanied by a written report. The report is submitted to the department, which specifies its format. A departmental faculty member supervises the project. Oral defense may be required.

ENGR 6900 - Independent Study

Units: 1-4

Course is based on selected research topics agreed upon by the student and the faculty supervising the course. A plan of work completion must be submitted and approved prior to proceeding with the project. The student will provide progress reports and a final report prior to final presentation to the committee.

ENGR 6999 - Issues in Engineering

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in engineering. May be repeated for credit when content varies, for a maximum of 8 units. *A-F grading only.*

English

ENGL 1001 - College Writing I

Units: 4

An introduction to writing for academic purposes, critical analysis, and argumentation. Must complete course with a grade of "C-" or better in order to earn General Education credit. *Prerequisites: Total Score of 147 or higher on the EPT or exemption from the EPT, passing ENGL 0910, or ENGL 0803.* Students should consult the section of the University Catalog or Class Schedule dealing with the English Placement Test (see Registration) before registering for English 1001. Because this is the freshman-level, transferable composition course (for California community colleges, colleges, and universities), students enrolling in the course should, at the time of entry, be able to write brief essays showing adequacy in 1. selection of a controlling idea appropriate to the given writing task; 2. coherent development of that idea to a reasoned conclusion; 3. use of sentences that demonstrate some structural variety and that contain language appropriate to the audience and purpose, and 4. control of the conventions of standard, written English (relative freedom from errors such as fragments, run-together sentences, faulty agreement, and improper pronoun reference) and of mechanics (capitalization, spelling, and punctuation). The work of the course is to strengthen these skills by extensive practice in the writing of expository essays suitable for college-level credit. Students deficient in these prerequisite skills will be advised to take developmental writing courses before enrolling in English 1001.

ENGL 1002 - College Writing II

Units: 4

Further work in expository writing with emphasis on argumentation and persuasion. Introduction to the preparation and writing of the research paper. *Prerequisites: ENGL 1001 with grade of "C-" or better.*

ENGL 1020 - College Reading for Fluency

Units: 4

Read multiple works of fiction and non-fiction to build English language fluency, academic vocabulary, learning strategy repertoire, and cultural background knowledge for the U.S. context. Enrollment limited to first-year international students. *Repeatable for a maximum of 8 units.*

ENGL 1101 - Adjunct Grammar Workshop and Lab for Non-Native Speakers of English

Units: 1

Focus on developing accuracy and style in written English. *Co-requisites: Enrollment in ENGL 1001.*

ENGL 1102 - Adjunct Grammar Workshop and Lab for Non-Native Speakers of English II

Units: 1

Focus on developing accuracy and style in written English. *Co-requisites: Enrollment in ENGL 1002.*

ENGL 2000 - Vocabulary Study for Non-Native Speakers of English

Units: 4

Vocabulary study, including word-formation, history, and idiomatic usage, for non-native speakers of English. Not open for credit towards General Education-Breadth Requirements or English major or minor. *A/B/C/NC grading only.*

ENGL 2005 - Grammar for Writers

Units: 4

Instruction in the structure and style of the standard, literary English sentence. Review of traditional grammar and usage, with attention to the integration of the sentence into its logical and rhetorical contexts.

ENGL 2010 - Vocabulary Building

Units: 4

Designed to help students build varied, precise vocabularies; introduces the historical development and present-day resources of the English vocabulary; special attention given to Latin and Greek word-building prefixes, suffixes, and elements. *Prerequisites: ENGL 1001.*

ENGL 2030 - Introduction to Critical Writing on Prose Fiction

Units: 4

The theory and practice of critical writing, based on readings in prose fiction. *Prerequisites: ENGL 1002.*

ENGL 2040 - Introduction to Critical Writing on Poetry

Units: 4

The theory and practice of critical writing, based on readings in poetry. *Prerequisites: ENGL 1002.*

ENGL 2050 - Introduction to Critical Writing on Drama

Units: 4

The theory and practice of critical writing, based on readings in drama. *Prerequisites: ENGL 1002.*

ENGL 2070 - Beginning Workshop in Fiction

Units: 4

Introduction to imaginative prose writing of various types with emphasis on basic narrative techniques. *Prerequisites: ENGL 1002 and ENGL 2030, or permission of instructor.*

ENGL 2075 - Beginning Workshop in Poetry

Units: 4

Introduction to poetry writing of various types with emphasis on basic techniques. *Prerequisites: ENGL 1002 and ENGL 2040, or permission of instructor.*

ENGL 2600 - Patterns of Immigration and Migration in U.S. Literature

Units: 4

Literary works that represent the social, political, and cultural effects of immigration and migration in the U.S.

ENGL 2740 - Introduction to American Cinema

Units: 4

A study of the American cinema introducing students to the language of film analysis and to key figures and films from the silent era, the development of the Hollywood studio system, the influence of independent filmmakers, and contemporary film productions. *Prerequisites: ENGL 1001.*

ENGL 2745 - Portrayal of American Groups through Film

Units: 4

Portrayal of American groups in American cinema, 1950 to the present. Lectures/discussion with films; reading of scripts and essays about film.

ENGL 3000 - Writing for Proficiency

Units: 4

Regular practice in the writing skills necessary to reach the level of proficiency, determined by portfolio assessment, required for students to move forward to the next level writing course and completion of the University Writing Skills Requirement (UWSR). Some students may demonstrate a level of proficiency in their portfolio to complete the UWSR at the end of ENGL 3000.

Prerequisites: ENGL 1001, or equivalent, and junior standing. Credit unavailable through challenge. Not for credit toward English major, English minor, Creative Writing minor, Liberal Studies major, or General Education requirements. CR/NC grading only.

ENGL 3001 - Writing for Proficiency for Non-Native Speakers of English

Units: 4

Instruction in this course is geared toward the needs of non-native speakers of English. Regular practice in the writing skills necessary to reach the level of proficiency, determined by portfolio assessment, required for students to move forward to the next level writing course and satisfaction of the University Writing Skills Requirement (UWSR). Some students may demonstrate a level of proficiency in their portfolio to complete the UWSR at the end of ENGL 3001. *Prerequisites: ENGL 1001, or equivalent, and junior standing. Credit unavailable through challenge. Not for credit toward English major, English minor, Creative Writing minor, Liberal Studies major, or General Education requirements. CR/NC grading only.*

ENGL 3003 - Discursive Writing

Units: 4

Theory and practice of discursive writing; critical reading and evaluation of formal and informal prose. *Prerequisites: Junior standing; and either a CR (Credit) in ENGL 3000 or ENGL 3001 or a score of 7 on the Writing Skills Test. Not for credit toward requirements of the English major, English minor, Creative Writing minor, or General Education.*

ENGL 3005 - Study of Language

Units: 4

Theory of language and communication; role of language in the personal and social development of the fully "human" being; origins, development, acquisition, and diversity of language; nature and function of symbolic systems; phonology, morphology, syntax, orthography, sign language, and semantics. *Prerequisites: ENGL 1001.*

ENGL 3010 - Modern English Grammar

Units: 4

A traditional philological description of the structure of standard written English. *Prerequisites: ENGL 1001 and junior standing.*

ENGL 3015 - Introduction to Phonology

Units: 4

An introduction to the methods that linguistics use to describe the sound systems of the languages of the world. Particular emphasis given to English sound patterns. *Prerequisites: ENGL 1001.*

ENGL 3020 - Advanced Expository Writing

Units: 4

An advanced course in the theory and practice of expository writing. Fulfills the University Writing Skills Requirement for students who began work on the present degree before Fall Quarter, 1985. *Prerequisites: ENGL 1002 and junior standing.*

ENGL 3025 - Introduction to Technical and Professional Writing

Units: 4

Overview of technical, professional, and workplace writing. Emphasis on finding and evaluating information, creating well-crafted, user-oriented documents, and using suitable applications to make information available in appropriate formats. Ethics of technical writing and writing in a multicultural context. *Prerequisites: ENGL 1002.*

ENGL 3040 - Linguistic History of the English Language

Units: 4

A linguistic approach to the origin and development of English, and its relations to cognate languages. *Prerequisites: ENGL 1001 and junior standing.*

ENGL 3045 - Advanced Studies in English Vocabulary

Units: 4

Advanced studies in English vocabulary: etymology, synonymy, word-formation, and meaning-development. Particular attention to Latin and Greek etymology. Course offered in both classroom and online formats. Consult Class Schedule for details.

ENGL 3050 - Language and Gender

Units: 4

Critical analysis and discussion of gender as it shapes and is reflected in spoken and written discourse. *Prerequisites: ENGL 1001 and junior standing.*

ENGL 3070 - Intermediate Workshop in Fiction

Units: 4

Imaginative prose writing, with emphasis on theory and techniques. Classroom analysis of student manuscripts and published stories; individual conferences. *Prerequisites: ENGL 2070 and consent of instructor.*

ENGL 3071 - Writing Women's Lives: A Workshop

Units: 4

Explores forms of personal narrative, with emphasis on students' own writing. Reading includes journal entries, letters, and autobiographical writings by a diverse cross-section of American women. *Prerequisites: ENGL 1002 and junior standing.*

ENGL 3075 - Intermediate Workshop in Poetry

Units: 4

Practice in form and technique; weekly manuscripts, class criticism, editorial conferences. *Prerequisites: ENGL 2075 and consent of instructor.*

ENGL 3080 - Introduction to Critical Theory of Literature

Units: 4

Examination and application of major critical approaches to literary analysis and interpretation. *Prerequisites: ENGL 2030, ENGL 2040, ENGL 2050 (or equivalents), and upper division standing in the English major.*

ENGL 3400 - Masterworks of British Literature

Units: 4

A selection of major works, in poetry, drama, and prose fiction, from British literature of all ages, medieval to modern. *Prerequisites: ENGL 1001 or equivalent.*

ENGL 3600 - Masterworks of American Literature

Units: 4

A selection of works, in poetry, drama, and prose fiction, from American literature of all periods, colonial to modern. *Prerequisites: ENGL 1001 or equivalent.*

ENGL 3650 - Women and Literature

Units: 4

Literary works written by women and/or images of women in literature by both female and male authors. The writings of North American authors of various ethnic and cultural backgrounds.

ENGL 3660 - Native American Literature

Units: 4

Native American myth, legend, and folklore, as well as nineteenth- and twentieth-century writing by Native Americans.

ENGL 3670 - Asian/Filipino American Literature

Units: 4

Five writers whose heritage is Asian/Filipino, but who are writing fiction or poetry in California.

ENGL 3680 - Hispanic/Latino/U.S. Literature

Units: 4

A survey of Latino American writing in the United States.

ENGL 3691 - Black Literature I

Units: 4

A comprehensive history of Black writing in America from the beginnings to 1930. *Prerequisites: ENGL 1001 and junior standing.* Cross-listed ES 3691.

ENGL 3692 - Black Literature II

Units: 4

A comprehensive history of Black writing in America from 1930 to the present. *Prerequisites: ENGL 1001 and junior standing.*

ENGL 3700 - Classical Literature

Units: 4

Readings in classical literature in translation: epic, lyric, satirical, and dramatic poetry of the Greeks and Romans. *Prerequisites: ENGL 1001 and junior standing.*

ENGL 3710 - Medieval Literature

Units: 4

Literary patterns in Medieval Europe: the epic, the courtly novel, and lyric poetry, from the troubadours to Chaucer. *Prerequisites: ENGL 1001 and junior standing. (On demand)*

ENGL 3720 - Renaissance Humanism

Units: 4

The contribution of classical learning to the European Renaissance. *Prerequisites: ENGL 1001 and junior standing. (On demand)*

ENGL 3730 - The Neo-Classical Tradition

Units: 4

The development of the neo-classical spirit in Western literature of the 17th and 18th centuries, with special reference to the literatures of France and England. *Prerequisites: ENGL 1001 and junior standing. (On demand)*

ENGL 3740 - The Romantic Era: 1770-1830

Units: 4

The dominant themes and styles of romanticism, with readings from major writers. *Prerequisites: ENGL 1001 and junior standing. (On demand)*

ENGL 3745 - The Gothic

Units: 4

The endangered heroine in English Gothic literature from Castle of Otranto to Rebecca.

ENGL 3760 - Literature of the Twentieth Century

Units: 4

Major movements in recent European and American literature, with emphasis on a major figure or figures. *Prerequisites: ENGL 1001 or junior standing. (On demand)*

ENGL 3770 - Gay and Lesbian Literature

Units: 4

Study of literary works written by and about gays and lesbians.

ENGL 3850 - The Graphic Novel: Form and Meaning in Comics

Units: 4

Study of the history, structure, and emerging patterns of the graphic novel, or comic book, a hybrid narrative form that blends literary and visual components. Analysis of primary sources and graphic novel criticism that explores the genre's cultural impact. *Prerequisites: Junior standing or permission of instructor.*

ENGL 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least 2.0 GPA; departmental approval of activity. CR/NC grading only.*

ENGL 3999 - Issues in English Language and Literature

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in English language and literature.

ENGL 4000 - Seminar in English Education

Units: 2

The integration of language, literature, and composition studies in the secondary-school curriculum, with on-site observation and supervised group discussion. *Prerequisites: Instructor's permission and junior standing.*

ENGL 4005 - Informational and Instructional Technology in the English Classroom

Units: 2

The technological resources currently available to English teachers including word-processing, data base, and spread sheet programs. Students learn to use grade-book and test-generation programs and other interactive technologies. They evaluate the effectiveness of Laser disk, CD ROM, and other technologies. *Prerequisites: ENGL 4000.*

ENGL 4010 - Current Theories in Formal Grammar

Units: 4

Introduction to current theories in the study of formal grammar. *Prerequisites: ENGL 3010.*

ENGL 4040 - Language in the U.S.A.

Units: 4

Overview of the language situation in the U.S.A. Regional, social and ethnic dialects. Stylistic variation, Spanish-English code switching/mixing. African American language. Pidgin-creole varieties. Implications for teaching and learning. *Prerequisites: ENGL 1001 or junior standing.*

ENGL 4060 - Topics in the Study of the English Language

Units: 4

Intensive study of a single aspect of the English language, or of a group of closely related aspects. Students may repeat ENGL 4060 for a maximum of 12 units, when the content differs. *Prerequisites: ENGL 1001. (Y)*

ENGL 4070 - Advanced Workshop in Fiction

Units: 4

Writing of long and short fiction. For the prospective professional writer. *Prerequisites: ENGL 3070, and consent of instructor.*

ENGL 4075 - Advanced Workshop in Poetry

Units: 4

Writing of poetry. For the prospective professional poet. *Prerequisites: ENGL 2075 and consent of instructor.*

ENGL 4151 - Introduction to Chaucer

Units: 4

A close reading of The Canterbury Tales with appropriate attention to its cultural context. *Prerequisites: ENGL 2040 and junior standing.*

ENGL 4251 - Shakespeare

Units: 4

Written, research-based examination of the dramatic conventions of Shakespeare theater; the Renaissance intellectual backgrounds; and a survey of representative plays and poems. *Prerequisites: ENGL 2040 and ENGL 2050. May be repeated once when content varies, for a maximum of 8 units. Satisfies GE Area C4.*

ENGL 4260 - Milton

Units: 4

A study of Milton's poetry and selected prose. *Prerequisites: ENGL 2030 and ENGL 2040.*

ENGL 4325 - Studies in 18th-Century British Literature

Units: 4

Intensive study of selected authors or topics of the Restoration and Neo-Classical periods. *Prerequisites: ENGL 2030 and ENGL 2040.*

ENGL 4411 - Studies in Early 19th-Century British Literature

Units: 4

Intensive study of selected authors or topics of the Romantic period. *Prerequisites: ENGL 2030 and ENGL 2040.*

ENGL 4412 - Studies in Late 19th-Century British Literature

Units: 4

Intensive study of selected authors or topics of the Victorian period. *Prerequisites: ENGL 2030 and ENGL 2040.*

ENGL 4450 - Studies in British Women's Literature

Units: 4

Intensive study of British women authors throughout the centuries. *Prerequisites: ENGL 2030 and ENGL 2040.*

ENGL 4635 - Studies in Mid-19th-Century American Literature

Units: 4

Intensive study of selected authors and topics of mid-19th century America. *Prerequisites: ENGL 2030 and ENGL 2040.*

ENGL 4636 - Studies in Late 19th-Century American Literature

Units: 4

Intensive study of selected authors and topics from the Civil War to 1914. *Prerequisites: ENGL 2030 and ENGL 2040.*

ENGL 4637 - Studies in 20th-Century American Literature

Units: 4

Intensive study of selected authors and topics from 1914 to the present. *Prerequisites: ENGL 2030 and ENGL 2040.*

ENGL 4650 - Studies in Ethnic American Women's Literature

Units: 4

Intensive study of selected Ethnic American women authors after 1900. *Prerequisites: ENGL 2030, ENGL 2040.*

ENGL 4660 - Ethnic American Autobiography

Units: 4

Intensive study of selected twentieth- and twenty-first-century autobiographies and memoirs by African American, Latino American, Asian American, Native American, and other ethnic American writers. *Prerequisites: ENGL 1001 and junior standing.*

ENGL 4710 - Bible for Students of Literature

Units: 4

Major events, characters, themes, and phrases of the authorized (King James) version of the Bible and the influence of these upon the literature and language of the English-speaking peoples.

ENGL 4720 - Mythology

Units: 4

Cosmologies and cosmogonies: readings from literatures of the Orient, the Near East, the Mediterranean, and Europe. *Prerequisites: ENGL 1001 and junior standing.*

ENGL 4740 - History of Children's Literature

Units: 4

History of children's literature to 1900--Literature for children from 1600 to 1900. Diverse literary and pictorial techniques; the cultural values that shape selected works for children. *Prerequisites: ENGL 1001 and junior standing.*

ENGL 4741 - Children's Literature in the 20th Century

Units: 4

Literature for children in the 20th century, and beyond. Diverse literary and pictorial techniques; the cultural values that shape selected works for children. *Prerequisites: ENGL 4740.*

ENGL 4743 - Children's Folklore

Units: 4

The politics and poetics of children's own storytelling and speech play, including songs, riddles, legends, and jokes. *Prerequisites: ENGL 1001 and junior standing.*

ENGL 4745 - Film Criticism

Units: 4

Lecture/discussion with films. Written critical resumes of the work of American and international writer-directors. Study of film scripts, emphasizing characterization, themes, and techniques. *Prerequisites: ENGL 1001.*

ENGL 4810 - English Drama Before 1642

Units: 4

A history of the drama from its liturgical beginnings to the closing of the theaters. *Prerequisites: ENGL 2040 and ENGL 2050.*

ENGL 4827 - 20th-Century Poetry

Units: 4

A study of representative British and American poets from 1914 to the present. *Prerequisites: ENGL 2040 or consent of instructor.*

ENGL 4831 - British Novel Before 1800

Units: 4

Development of the British novel from its beginnings through the 18th century. *Prerequisites: ENGL 2030 and ENGL 2040.*

ENGL 4832 - British Novel, 1800-1914

Units: 4

Development of the British novel through the Romantic and Victorian periods and up to the beginning of World War I. *Prerequisites: ENGL 2030 and ENGL 2040.*

ENGL 4833 - British Novel from 1914 to 1945

Units: 4

A study of the development of the 20th century British novel from World War I through World War II. *Prerequisites: ENGL 1001 and junior standing.*

ENGL 4840 - The Short Story

Units: 4

Development of the modern short story in America and Europe. *Prerequisites: ENGL 2030.*

ENGL 4845 - The Short Story: A Global Perspective

Units: 4

Reading and analysis of short stories from around the world, classic and contemporary. *Prerequisites: ENGL 1001 and junior standing.*

ENGL 4860 - American Fiction to 1914

Units: 4

The development of American fiction from Cooper to Dreiser, including Poe, Hawthorne, Melville, Twain, James, and others. *Prerequisites: ENGL 2030 and ENGL 2040.*

ENGL 4870 - The American Novel, 1914-1945

Units: 4

Development of the 20th century American novel from World War I through World War II. *Prerequisites: ENGL 1001 and junior standing.*

ENGL 4876 - Current American and British Novel

Units: 4

Development of the British and American novel since 1975. *Prerequisites: ENGL 2030.*

ENGL 4890 - Senior Seminar in English

Units: 4

Development of the English major portfolio, including one written, research-based essay, along with development of and preparation for an exit examination in the degree major, part of which will focus on the individual option. *Prerequisites: English major and Senior standing.*

ENGL 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

English: Graduate

ENGL 6001 - Introduction to Graduate Studies

Units: 4

Introduction to the major research tools for the study of English; survey and evaluation of various methods in literary criticism. Required for M.A. in English.

ENGL 6060 - The Literary Magazine

Units: 4

Practicum in which students learn about editing, layout, graphics, marketing, and distribution of a literary journal by working to produce the English Department's annual literary publication, Arroyo Literary Review, and by studying other university-based literary journals. May be repeated once for credit, with permission of the instructor, for a maximum of 8 units. *CR/NC grading only.*

ENGL 6070 - Graduate Workshop in Fiction

Units: 4

Writing of long and short fiction. Theory and analysis of the art of fiction. For the prospective professional writer. May be repeated once for credit with consent of instructor, for a maximum of 8 units.

ENGL 6075 - Graduate Workshop in Poetry

Units: 4

Writing of poetry. Theory and analysis of the art of poetry. For the prospective professional writer. May be repeated once for credit with consent of instructor, for a maximum of 8 units.

ENGL 6100 - Seminar in Medieval Literature

Units: 4

Study of major works, authors, and literary topics of the medieval period; at least one work read in the original language. May be repeated once for credit with consent of instructor, for a maximum of 8 units.

ENGL 6215 - Seminar in Renaissance Literature

Units: 4

Study of major works, authors, and literary topics of the Tudor and Stuart periods. May be repeated once for credit with consent of instructor, for a maximum of 8 units.

ENGL 6350 - Seminar in Restoration and 18th-Century British Literature

Units: 4

Study of major works, authors, and literary topics of the Restoration and the 18th century. May be repeated once for credit with consent of instructor, for a maximum of 8 units.

ENGL 6405 - Seminar in 19th-Century British Literature

Units: 4

Study of major works, authors, and literary topics of the Romantic and Victorian periods. May be repeated once for credit with consent of instructor, for a maximum of 8 units.

ENGL 6501 - Theory and Practice of Teaching ESL I

Units: 4

Focuses on current research as well as practical, innovative methods for teaching ESL to adult learners.

ENGL 6502 - Theory and Practice of Teaching ESL II

Units: 4

Focuses on current research as well as practical, innovative methods for teaching ESL to adult learners.

ENGL 6503 - Second-Language Acquisition

Units: 4

Psycholinguistic and sociolinguistic processes as well as affective factors involved in the acquisition of a second language, with emphasis on adult learners of English.

ENGL 6504 - Morphology and Lexical Semantics

Units: 4

Investigation of the structural composition of English words, with emphasis on processes of word formation and theories of meaning and meaning change. Analysis of errors made by ESL learners.

ENGL 6506 - Sociolinguistics

Units: 4

Relationship between language and society. Language variation associated with different geographic, ethnic, and socioeconomic groups and social situations. Implications for teaching English as a Second Language.

ENGL 6507 - Testing and Evaluation for Teaching ESL

Units: 4

Methods of assessing proficiency in speaking, understanding, reading, and writing a second language. Examines adequacy of traditional evaluation methods as well as procedures in test construction and evaluation.

ENGL 6508 - Supervised Tutoring/Teaching

Units: 4

Supervised work with students in ESL classes and tutorials. Course must be repeated as required in the TESOL option for maximum credit of 8 units.

ENGL 6509 - Computer Assisted Language Learning and Teaching

Units: 4

Methods of integrating the computer into teaching ESL to adult learners. Considers theoretical and practical issues.

ENGL 6510 - Pedagogical Grammar

Units: 4

Examination of grammar needed by ESL students to develop their analytical and critical thinking skills, comprehension of ESL students' problems and challenges with learning grammar, and investigation of strategies, methods and approaches to teaching grammar effectively to ESL students. *A-F grading only.*

ENGL 6600 - Seminar in American Literature to 1900

Units: 4

Study of major works, authors, and literary topics before 1900. *Prerequisites: Graduate standing in English or consent of instructor.* May be repeated once for credit with consent of instructor, for a maximum of 8 units.

ENGL 6608 - Supervised Composition Teaching/Tutoring

Units: 4

Supervised practice in composition classes and tutorials.

ENGL 6650 - Seminar in Women's Literature

Units: 4

Literary works written in English by women authors throughout the ages. May be repeated once for credit with consent of instructor, for a maximum of 8 units.

ENGL 6660 - Seminar in 20th Century British Literature

Units: 4

Study of major British works, authors, and literary topics of the 20th century. May be repeated once for credit, for a maximum of 8 units.

ENGL 6665 - Seminar in 20th Century American Literature

Units: 4

Study of major American works, authors, and literary topics of the 20th century. May be repeated once for credit with consent of instructor, for a maximum of 8 units.

ENGL 6675 - Studies in Poetry and Poetics

Units: 4

Prosody and other formal issues; theory and practice of one poet or of a particular "school" or movement; relationships between poetry and cultural contexts. May be repeated once for credit with consent of instructor and when content varies, for a maximum of 8 units.

ENGL 6690 - Seminar in African-American Literature

Units: 4

Major works, authors, and literary topics of the 19th and 20th centuries. May be repeated for credit with consent of instructor.

ENGL 6750 - Theory and Practice of Composition

Units: 4

Focus on current research in theory and methods of teaching composition.

ENGL 6770 - Theory and Practice of Teaching Literature

Units: 4

Theory and methods for teaching literary genres and periods appropriate for high school and community college literature courses.

ENGL 6898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for credit, for a maximum of 8 units. *CR/NC grading only.*

ENGL 6900 - Independent Study

Units: 1-4

ENGL 6909 - Departmental Thesis

Units: 1-5

Development and writing of a research paper for submission to the department, which specifies its format. The written project, focusing on TESOL research, includes a survey of current literature and a bibliographical essay on an important issue in the field. Supervised by a departmental committee, at least one member of which must be a Cal State East Bay faculty member. Oral defense is normally required.

ENGL 6910 - University Thesis

Units: 4

Development and writing of a formal research paper for submission to the University in the specified bound format. Supervision by a departmental committee, at least one member of which must be a Cal State East Bay faculty member. Oral defense normally required. (See also, "University Thesis Writing Guide," www.csueastbay.edu/thesiswritingguide.)

ENGL 6999 - Issues in English Language and Literature

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in English language and literature. May be repeated for credit when content varies, for a maximum of 8 units.

Environmental Science

ENSC 2210 - Environmental Geology

Units: 4

See GEOL 2210 for course description.

ENSC 2211 - Environmental Geology Laboratory

Units: 1

See GEOL 2211 for course description.

ENSC 2300 - Global Change: Planet in Crisis

Units: 4

Processes and drivers of global environmental change over various time scales, impact of natural and anthropogenic factors, human and environmental consequences. Topics include orbital variations, greenhouse gases, ozone, El Niño, carbon cycle, ocean circulation, sea level, climate variability, modeling.

ENSC 2400 - Environmental Biology

Units: 4

Introduction to living organisms focusing on organismal interactions with their environment and with other organisms, relationships between organismal structure and function, effects of humans on biological diversity and ecosystems, and conservation of species. Recommended co-requisite: ENSC 2401 (lab).

ENSC 2401 - Environmental Biology Laboratory

Units: 1

Investigations of the interactions of living organisms with their environment and with other organisms, how organismal structure and function influence where and how they live, effects of humans on biological diversity. *Prerequisites: ENSC 2400 or concurrent enrollment.* Three hrs. lab.

ENSC 2800 - Environmental Problems of California

Units: 4

Human impact on the biologic and geologic environment in California. Resource needs, waste issues, species diversity, and ecosystem degradation. Not open to students with credit for ENSC 2801 or ENSC 2802.

ENSC 2801 - Global Environmental Problems

Units: 4

Human impact on the biologic and geologic environment in California and throughout the world. Resource needs, waste issues, species diversity, and ecosystem degradation. Not open to students with credit for ENSC 2800 or ENSC 2802.

ENSC 2802 - Global Environmental Issues

Units: 4

Biologic and geologic environment in California and throughout the world with emphasis on human impact. Resource needs, waste issues, species diversity, and ecosystem degradation. Not open to students with credit for ENSC 2800 or ENSC 2801.

ENSC 2900 - Field Activity in Environmental Science

Units: 3

Introduction to environmental issues in the local area through weekly visits to natural sites, industrial and commercial facilities, environmental treatment and remediation sites. *Recommended preparation: High school preparation in environmental science or an introductory Environmental Science course (ENSC 2800, ENSC 2801, or ENSC 2802).* One hr. lect, 6 hrs. field.

ENSC 3500 - Environmental Hydrology

Units: 4

The hydrologic cycle from precipitation, evapotranspiration, infiltration and runoff, to surface and groundwater. Hydrograph analysis, effects of human activities on streamflow and the riparian environment. Surface water and groundwater contamination and remediation methods. Predicted effects of climate change on water resources in California and the Western U.S.

Prerequisites: GEOL 2101 or GEOL 2210 or equivalent; ENSC 2800 or ENSC 2801 or ENSC 2802 or equivalent; and CHEM 1011 or equivalent. Cross-listed GEOL 3500. Two hrs. lect., 6 hrs. lab.

ENSC 3999 - Issues in Environmental Science

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in environmental science. May be repeated for credit when content varies, for a maximum of 8 units.

ENSC 4140 - Hazardous Waste Management

Units: 4

Study of the investigation and clean-up of hazardous waste sites. Environmental regulations, hazard awareness, contaminant characterization, personal protective equipment, monitoring and sampling equipment, site characterization and control, decontamination, operational hazards and overview of emergency response. *Prerequisites: CHEM 1101, CHEM 1102, CHEM 1103 or equivalent; ENSC 2800, or ENSC 2801 or ENSC 2802 or equivalent. Cross-listed GEOL 4140.*

ENSC 4200 - Global Change

Units: 4

Interaction of Earth's systems (biosphere, lithosphere, hydrosphere, cryosphere, and atmosphere) and links between life, oceans, climate, and the solid earth. This course will focus on biophysical systems, ecological responses, human activities, future scenarios, and sustainability. *Prerequisites: ENSC 2800, or ENSC 2801 or ENSC 2802 or equivalent.*

ENSC 4800 - Seminar in Environmental Science

Units: 3

Advanced study of environmental issues based on papers presented by students. Topics to change with each course offering. Team-taught by faculty from different departments in Environmental Sciences. *Prerequisites: Completion of Environmental Sciences core and senior or graduate standing.*

ENSC 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

Environmental Studies

ENVT 2000 - Introduction to Environmental Studies

Units: 4

Survey of important local, national, and world environmental problems, emphasizing a multidisciplinary approach. Not open to students with credit for ENVT 2001.

ENVT 2001 - Environmental Perspectives

Units: 4

Basic concepts of the global human environment: problems and causes, including ecosystem imbalance, human population

explosion, fossil fuel depletion and search for alternatives, air and water pollution, solid and hazardous waste disposal, climate change, deforestation, and rangeland management. Not open to students with credit for ENVT 2000.

ENVT 3400 - Environmental Resource Analysis

Units: 4

Quantitative methods for environmental problem solving including unit analysis, computer aided analysis, common functions, statistics, and error analysis.

ENVT 3480 - Applied Field Studies

Units: 4

(See GEOG 3480 for course description.)

ENVT 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least 2.0 GPA; departmental approval of activity. A maximum of 4 units will be accepted toward the Environmental Studies major; a maximum of 4 units will be accepted toward the Geography minor.* May be repeated for credit for a maximum of 8 units. *CR/NC grading only.*

ENVT 3999 - Issues in Environmental Studies

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in environmental studies. May be repeated for credit when content varies, for a maximum of 8 units.

ENVT 4100 - Environmental Impact Analysis

Units: 4

The language and changing dynamics of the environmental review process. Contents and standards of environmental impact reports and their role in the planning process.

ENVT 4300 - Environmental Field Studies

Units: 5

Weekly visits to various sites throughout the Greater Bay Area to observe environmental processes. Natural areas, industrial facilities, environmentally related agencies. Strongly Recommended: Strongly Recommended: ENVT 4100. *Prerequisites: Senior standing in Environmental Studies.* One hr. lect., 8 hrs. field.

ENVT 4320 - Energy and Society

Units: 4

(See GEOG 4320 for course description.)

ENVT 4800 - Senior Seminar in Environmental Studies

Units: 3

Problem-oriented around selected topics of environmental concern, and requiring projects or reports. Strongly Recommended: Strongly Recommended: ENVT 4300. *Prerequisites: ENVT 2000; restricted to seniors completing the major or minor in Environmental Studies.*

ENVT 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

ENVT 4910 - Internship in Environmental Studies

Units: 2-4

Assignments in public and private agencies on projects related to citizen action, environmental planning, or in research. Supervision and evaluation by agency personnel and the course instructor. Students exchange ideas and experiences in weekly group sessions which are conducted by the instructor. *Prerequisites: ENVT 2000 and consent of instructor.* May be repeated once for credit, for a maximum of 8 units. Ten to twenty hours weekly.

Ethnic Studies

ES 1001 - Introduction to Ethnic Studies

Units: 4

An examination of dominant historical and philosophical research trends in Ethnic Studies. Multi- and inter-disciplinary approaches to the study of the African American, Asian American, Mexican/Latino American, and Native American experience.

ES 1005 - Viewing Diversity

Units: 4

Basic social science approaches to the study of local, national, and global constructions and representations of cultural diversity.

ES 1201 - Ethnicity in American History I

Units: 4

Topical and comparative approach to the contributions of diverse peoples and cultures to the development of the United States from European contact to 1877.

ES 1202 - Ethnicity in American History II

Units: 4

Topical and comparative approach to the contributions of diverse peoples and cultures to the development of the United States from 1877 to the present.

ES 3000 - Ethnic Writers

Units: 4

A critical examination of the novels of twentieth century minority American writers. Advanced principles of composition and style. Fulfills the University Writing Skills Requirement for students who began work on the present degree before Fall quarter 1985. *Prerequisites: ENGL 1001 or equivalent.*

ES 3010 - Decolonize Your Diet: Food Justice in Communities of Color

Units: 4

Explores issues related to food justice in communities of color in the US. Topics may include recovering knowledge about ancestral foods, community gardens in urban environments, or healing from Western diseases, such as diabetes and heart disease.

ES 3030 - Immigrant and Refugee Women

Units: 4

Changes and continuities in the lives of immigrant and refugee women, especially with reference to the conditions leading to their departure from their countries of origin and adaptation and resettlement in the United States. Cross-listed WOST 3030.

ES 3140 - Racism and Sports

Units: 4

Biographical approach to the study of racism in sports. The lives of significant African American sports figures as a backdrop for an examination of broader social, economic, and political issues. *Not open to those with credit for KIN 3735.*

ES 3230 - Oral Traditions

Units: 4

Critical examination of oral traditions, collective memory, folklore, and testimonial literature of America's multicultural experience. Emphasis on community dynamics, immigration, pop-culture, folklore, and family history.

ES 3333 - Ethics and Minority Politics

Units: 4

(See POSC 3333 for course description.)

ES 3420 - Minority Women in America

Units: 4

(See WOST 3420 for course description.)

ES 3430 - Interracial Sex and Marriage

Units: 4

Interracial sex and marriage in the U.S. through literature and film. Themes/images will be placed within a larger historical context of shifting attitudes about race and gender.

ES 3434 - Mixed Race Identities

Units: 4

Examination of mixed race peoples-their legal and social status, U.S. Census designations, and identities from the one-drop rule to President Obama and beyond. The social science complement to ES 3430, Interracial Sex and Marriage.

ES 3650 - Sikh American Experience

Units: 4

Examination of salient issues in the lives of contemporary Sikh American communities, a rapidly growing, highly educated, and financially successful- yet rarely studied and little known-racialized and religious community in the United States.

ES 3700 - Special Topics in Ethnic Studies

Units: 4

Topics of current interest in Ethnic Studies. *Prerequisites: Consent of instructor.* May be repeated once for credit for a maximum of 8 units.

ES 3889 - Engaging Communities of Color

Units: 4

Supervised internships designed to enable students to apply ethnic studies analytical perspectives that center race, class, gender and sexual identities. Students will be directed toward organizations reflecting their personal interests in social justice, the environment, health, art, youth, etc.

ES 3999 - Issues in Ethnic Studies

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in ethnic studies. May be repeated for credit when content varies, for a maximum of 8 units.

ES 4020 - Senior Seminar

Units: 2

A cross-discipline and interdisciplinary approach to theory and method. Emphasis on methodological and theoretical models that have shaped and informed the field of Ethnic Studies. Course will integrate a field learning component. *Prerequisites: Senior status.*

ES 4030 - Senior Thesis

Units: 2

A cross-disciplinary and interdisciplinary approach to theory and method. Emphasis on organization and writing of a major research paper. *Prerequisites: ES 4020.*

ES 4040 - Senior Seminar

Units: 4

Provides students with a culminating educational experience that emphasizes professional development and preparation for graduate-level research and writing. Students will produce a 10-page thesis, and participate in poster sessions, and mock academic conferences held in face-to-face and online formats. *Prerequisites: Approval of major department and/or instructor.*

ES 4900 - Independent Study

Units: 4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

Ethnic Studies: African American Studies

ES 1022 - African Americans and Popular Culture

Units: 4

Focus on the performing arts as a medium for understanding ethnicity and American popular culture. Topics include African Americans in relation to artistic voice, access, marginality, and exclusion.

ES 2175 - Hip Hop Nation

Units: 4

Interdisciplinary examination of the development of hip-hop as aesthetic, cultural, and political practice. The course utilizes multidisciplinary perspectives and examines the socio-auditory evolution of hip-hop from local neighborhoods to a generational worldview.

ES 2300 - The Black Cinematic Tradition

Units: 4

A critical examination of historically significant black films, from 1915 to the present. Comparative and interdisciplinary in approach. The impact of the minstrel theatre tradition on early black films, the role of independent film producers and directors in creating alternative and more multidimensional images of blacks, and the more recent crossover tradition in American films. Representative films from each decade.

ES 3103 - The African Diaspora

Units: 4

An interdisciplinary approach to the African Diaspora in the Americas. Introduction to major works that focus on the cultural, historical, and intellectual experiences of Africans in the Diaspora.

ES 3105 - African American Identity

Units: 4

A study of the unique psychology which evolved as a result of the Black experience in America and how it is related to the basic processes of human behavior.

ES 3110 - Racism in America I

Units: 4

An examination of racist attitudes, behavior, and policies of America and Americans.

ES 3120 - The Civil Rights Movement

Units: 4

The historical, socioeconomic and political development of the major civil rights movements in the United States.

ES 3130 - Slavery in the Americas

Units: 4

The African slave trade and slavery. Emphasis on the relations among the institutions of slavery, racism and capitalism.

ES 3146 - Jazz on Film

Units: 4

Critical perspectives on cinematic representations of jazz music and musicians. Emphasis on deconstructing history of racialized images of African American jazz innovators.

ES 3147 - The Fictional Africa

Units: 4

A critical comparative examination of Africa and people of African descent as depicted in literature, film, and other popular media.

ES 3165 - African American Sexuality

Units: 4

The historical impact of African sexual attitudes and practices on both the European and the slave. The subsequent social and structural development in this society of contemporary African American sexual attitudes and behaviors. Within this context, a critical analysis of longheld African American sexual stereotypes and related problems.

ES 3190 - Internationalist Worldview of Malcolm X

Units: 4

Development of the critical thinking skills and background with which to better understand the life, ideas, and beliefs of the late African American activist, Malcolm X, largely through the use of primary documents.

ES 3303 - Contemporary African American Women Writers

Units: 4

Interpretation and discussion of literary works by contemporary African American women writers. Emphasis on the shifting trends in content, form, and structure.

ES 3691 - Black Literature I

Units: 4

(See ENGL 3691 for course description.)

ES 3720 - James Baldwin

Units: 4

Critical assessment of James Baldwin's contribution to American discourses on race, gender, and sexuality through interpretation of his novels, short stories, essays, and plays. Emphasis on Baldwin's synthesis of race and gay consciousness and the political dimensions of homosexuality.

ES 3721 - African-American Philosophical Perspectives

Units: 4

(See PHIL 3721 for course description.)

ES 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least a 2.0 GPA; departmental approval of activity. A maximum of 4 units will be accepted toward the Ethnic Studies major; a maximum of 4 units will be accepted toward the minor. May be repeated for a maximum 8 units. CR/NC only.*

Ethnic Studies: American Indian Studies

ES 2320 - American Indian Oral Literature

Units: 4

An examination of American Indian oral tradition in historical and contemporary contexts. Approaches oral and written literatures as subjective and objective ways of knowing the world. Emphasis is placed on experiencing traditional learning methods of American Indian oral-based cultures.

ES 2400 - Introduction to American Indian Studies

Units: 4

Introduction to academic discipline of American Indian Studies. Includes several overlapping themes: North American history, education, religion, etc., and provides the interdisciplinary basis for understanding historical and contemporary problems of American Indian peoples. Not open to students with credit for ES 1300.

ES 3305 - Contemporary American Indian Life

Units: 4

Social and economic conditions of contemporary American Indian Life. Stereotypes, discrimination, poverty, and their effects on individuals. Contemporary social movements.

ES 3310 - God is Red: American Indian World View

Units: 4

A comparative study of American Indian belief systems, world views, and religions, analyzing their roles and importance in Indian life.

ES 3330 - American Indian Revitalization Movements

Units: 4

Study of American Indian movements aimed at liberation and revitalization from the effects of European conquest. Social and political problems of political domination. *Prerequisites: Consent of instructor.*

ES 3800 - Peoples of Central America

Units: 4

The developmental relationship between United States' communities of Central America origin and contemporary Central America. Focus on historical, socioeconomic, and cultural factors, as well as nationalistic movements, economic dependence, migration patterns (to the United States) and social change.

ES 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least a 2.0 GPA; departmental approval of activity. A maximum of 4 units will be accepted toward the Ethnic Studies major; a maximum of 4 units will be accepted toward the minor.* May be repeated for credit for a maximum of 8 units. *CR/NC only.*

Ethnic Studies: Asian American Studies

ES 2500 - Introduction to Asian American Studies

Units: 4

Introduction to the Asian American experience from an interdisciplinary perspective including popularized version of Asian Americans as the "model minority;" theoretical, statistical, historical, and personal approaches. Critical analysis and discussion of the position Asian Americans hold in society. Not open to students with credit for ES 1500.

ES 3500 - The Afghan Diaspora

Units: 4

Interdisciplinary approach to the Afghan Diaspora in the United States. An examination of the cultural, historical, communicative, and socioeconomic experiences of Afghans in the Diaspora.

ES 3552 - The Chinese Experience in the United States

Units: 4

Survey of the Chinese American experience from the nineteenth century "bachelor" societies to the present. Special attention given to issues of generation, social class, gender, sexual orientation, year and condition of entry, and place of residence. Not open to students with credit for ES 2552.

ES 3555 - Asian American Family Patterns

Units: 4

The family is conceptualized as an adaptable institution. How changes in larger society-immigration, race relations, gender roles-affect the Asian family in the United States. Topics include "bachelor" communities, picture brides, and interracial relationships. Cross-listed SOC 3555. Not open to students with credit for SOC 3417.

ES 3556 - Concentration Camps, U.S.A.

Units: 4

The personal, social, legal, and economic impact of U.S. Government evacuation and internment of U.S. citizens of Japanese ancestry during World War II. Comparison with contemporary detentions of U.S. residents during times of national crisis.

ES 3557 - Asian American Film Festival

Units: 4

In-class scholarly research on Asian American films from local annual film festivals. Hands-on film festival experience with the Center for Asian American Media and/or the San Francisco International Film Festival. May be repeated once for credit when content varies, for a maximum of 8 units.

ES 3600 - Presumed Guilty: Asian Americans and the Post-9/11 Racialized State

Units: 4

Examination of the daily racialized realities of life for Asian Americans in the post-9/11 United States, with specific emphasis on the newly-articulated relationship between the state and various Asian American communities, especially Arab, Muslim, and South Asian Americans.

ES 3610 - South Asian American Experience

Units: 4

Examination of salient issues in the lives of contemporary South Asian American communities.

ES 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least a 2.0 GPA; departmental approval of activity. A maximum of 4 units will be accepted toward the Ethnic Studies major; a maximum of 4 units will be accepted toward the minor.* May be repeated for credit for a maximum of 8 units. *CR/NC only.*

Ethnic Studies: Genders and Sexualities in Communities of Color

ES 2700 - Introduction to Genders and Sexualities in Communities of Color

Units: 4

Critical study of the social construction of gender and sexuality in African American, Latino/a, Asian American, and Native American communities and contexts. Not open to students with credit for ES 1700.

ES 3710 - Racialized Masculinities

Units: 4

Historical, cultural, structural, and personal meanings of masculinity for men and women of color. Ontological and epistemological explorations of race, class, gender, and sexuality.

ES 3730 - Women of Color, Genders and Sexualities

Units: 4

Critical examination of the multiple meanings of gender and sexuality to women of color in the US. May include discussion of lesbian and bisexual of color identities, reproductive politics, and safe-sex practices.

ES 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least a 2.0 GPA; departmental approval of activity. A maximum of 4 units will be accepted toward the Ethnic Studies major; a maximum of 4 units will be accepted toward the minor.* May be repeated for credit for a maximum of 8 units. *CR/NC only.*

ES 4300 - Queer of Color Subjects and Critical Theory

Units: 4

Examination of cultural and theoretical work constituting queer of color identities. Emphasis on queer theory and its precursors, including Freud and Foucault, in relation to people of color.

Ethnic Studies: Latino/a Studies

ES 2200 - Introduction to Latino/a and Latin American Studies

Units: 4

Historical, multidisciplinary overview of Latino/a studies. Focus on the socio-political and cultural experience of U.S. Latinos/as. Critical review of extant literature in the field, with particular emphasis on immigrant trends and identity and borderland issues. Not open to students with credit for ES 1200.

ES 3210 - Latinas in the United States

Units: 4

Examines historically, culturally, and theoretically the condition of Latinas in the United States.

ES 3255 - The Chicano Movement

Units: 4

Historical and social aspects of the Chicano Movement. Examines the artistic, political, and literary contributions of the Chicano Movement and its impact on American society.

ES 3265 - Latino/a Sexualities

Units: 4

Interdisciplinary examination of Latino/a sexualities, including discussion of historical dimensions, popular culture representations, parent-child communication, sex work, HIV education, social construction of Latino/a heterosexualities, and GLBTQ Latinos/as.

ES 3805 - Latin American Immigration

Units: 4

An examination of Mexican, Puerto Rican and Latin American immigration to the United States from a comparative political-economic perspective.

ES 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least a 2.0 GPA; departmental approval of activity. A maximum of 4 units will be accepted toward the Ethnic Studies major; a maximum of 4 units will be accepted toward the minor.* May be repeated for credit for a maximum of 8 units. *CR/NC only.*

ES 4290 - Latino Politics and Public Policy

Units: 4

Contemporary social issues and public policy questions in the Mexican American/Latino community. Areas include race relations, immigration, feminization of poverty, education, housing, unemployment, juvenile delinquency, and criminal justice.

Finance

FIN 2300 - Personal Finance

Units: 4

Principles and practices of money management, consumer credit, savings, investments, taxation, and consumer protection.

Prerequisites: ELM exemption or an ELM score above 540 or ELM2 score of 50 or higher or completion of MATH 950.

FIN 3300 - Financial Management

Units: 4

Theory and practices that underlie the financial manager's decision-making process. Capital investment analysis, capital structure, dividend policy, risk and return, and market valuation of the firm. *Prerequisites: ACCT 2251; ECON 2301 and ECON 2302; STAT 2010 or STAT 1000.*

FIN 3360 - Management of Risk and Insurance

Units: 4

Techniques of risk management and uses of insurance contracts for individual and business insurance planning. The operation and regulation of the insurance industry and contract provisions for property, liability, life, annuity, health, and disability insurance. *Prerequisites: Junior standing.*

FIN 3400 - Principles of Real Estate

Units: 4

Fundamental tools of real estate decision-making and the management of real estate development, finance, investment valuation and operations. Strongly Recommended: *ACCT 2701.*

FIN 3410 - Real Estate Practice

Units: 4

Daily responsibilities of real estate sales and brokerage practices, the selling and buying processes of real property from listing to closing escrow, the purpose and importance of title. Ethical responsibilities of owning and operating a real estate business.

Prerequisites: FIN 3400. A-F grading only.

FIN 3420 - Real Estate Law

Units: 4

Legal facets of real property acquisition, ownership and disposition. Importance of titles, deeds, easement creation, zoning laws, leases and contracts, community property, types of tenancies. Introduction to mortgage and construction laws, brokerage laws and land-use regulation. *Prerequisites: FIN 3400. A-F grading only.*

FIN 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least 2.0 GPA; departmental approval of activity.* May be repeated for credit, for a maximum of 8 units. Units not applicable to options or minor. *CR/NC grading only.*

FIN 3999 - Issues in Finance

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in finance. *Prerequisites: Consent of instructor.* May be repeated for credit when content varies, for a maximum of 8 units.

FIN 4300 - Corporate Finance

Units: 4

In-depth study of theories and practices of corporate financial management. Emphasis on corporate financial decision-making, including capital budgeting, capital structure, dividend policy, risk management, and international financial management. *Prerequisites: FIN 3300.*

FIN 4305 - Entrepreneurial Finance

Units: 4

An analysis of the unique features of entrepreneurial finance. Emphasis will be on examining the characteristics, structure and valuation of ventures. Various aspects of the venture capital industry are addressed. *Prerequisites: FIN 3300. A-F grading only.*

FIN 4310 - Investment Analysis

Units: 4

Introduction to security analysis and portfolio management. *Prerequisites: FIN 3300.*

FIN 4315 - Derivatives Markets

Units: 4

Financial derivatives markets. Option markets, valuation, and strategies; futures markets and strategies; risk management and hedging; swaps and financial engineering. *Prerequisites: FIN 3300, MATH 1810; senior or graduating senior, and consent of instructor.*

FIN 4320 - Problems in Corporate Finance

Units: 4

Studies of specific problems in corporate financial policy formulation and decision-making using financial data bases and models. *Prerequisites: FIN 3300.*

FIN 4328 - Risk Management in Financial Institutions

Units: 4

An in-depth analysis of the unique features of financial institutions. Emphasis on examining the nature of risk exposures and strategies to manage risk. Various aspects of financial instruments, regulations, and crises are addressed. *Prerequisites: FIN 3300. A-F grading only.*

FIN 4330 - Financial Modeling

Units: 4

Using spreadsheets to solve a range of financial problems in investments, small business and corporate finance. Hands-on application of financial concepts in order to develop skills useful in a variety of jobs in finance, accounting, insurance, real estate and management. *Prerequisites: FIN 3300. A-F grading only.*

FIN 4370 - Seminar in Financial Theory

Units: 4

Selected topics dealing with recent developments in financial theory and management practice. *Prerequisites: FIN 3300; senior or graduating senior, and consent of instructor.* May be repeated once for credit with the approval of the department, for a maximum of 8 units.

FIN 4375 - International Business Finance

Units: 4

Financial aspects of international business including international financial markets, foreign exchange management, foreign investment, multinational capital budgeting, working capital management, financing of international business including import-export financing and international banking. *Prerequisites: FIN 3300.* Not open to those with credit for FIN 6375.

FIN 4410 - Real Estate Finance and Investment

Units: 4

Study of equity, mortgage, lease, sale and lease-back, and innovative methods of financing, including related tax effects. *Prerequisites: FIN 3300 and either FIN 3400 or graduating senior.*

FIN 4415 - Real Estate Valuation

Units: 4

Applications of investment analysis and appraisal theory to real estate management. *Prerequisites: FIN 4410.*

FIN 4420 - Sustainable Real Estate Development

Units: 4

Course Content: Detailed analysis of sustainability applying to real estate development. Includes resources and costs of rehabilitation and construction of green building technology. Topics include: building sustainable infrastructure and financial impacts including developer's costs and returns on "green" projects. *Prerequisites: FIN 3400, FIN 4410 or FIN 4415 with a grade of a C or better.*

FIN 4470 - Real Estate Markets and Housing Policies

Units: 4

Topics in real estate markets, regulations, housing policies, and structured mortgage products. *Prerequisites: FIN 3400.*

FIN 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

Finance: Graduate

FIN 6215 - Corporate Financial Management

Units: 4

Theory and practice of financial decision making. Topics include corporate governance, corporate performance analysis, capital investment decisions, valuation and cost of capital, long-term financial policy, short-term financial policy, dividend policy decisions, mergers and acquisitions. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update. A-F grading only.*

FIN 6305 - New Venture Financing

Units: 4

Concepts and practices of financing and financial management of a new venture or expansion of an existing growth business. Valuation, financial planning, corporate structuring, exit strategies, private placement, initial public offerings venture capital, and other current issues. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update.*

FIN 6310 - Seminar in Security Analysis and Portfolio Management

Units: 4

Theory and practice of security investment. Investment environment and instruments, capital asset pricing theory, technical and fundamental analysis of common stock portfolio analysis, bond analysis and management, mutual funds and investment companies, and financial derivatives. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update.*

FIN 6315 - Seminar in Options and Futures

Units: 4

Financial derivative markets. Option markets, valuation, and strategies; futures markets and strategies; risk management and hedging; swaps and financial engineering. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update.*

FIN 6320 - Studies in Financial Markets

Units: 4

Evolution and structure of financial markets, instruments, and institutions. The process of intermediation including the development of risk reduction devices and the growth of securitization. Focus is on debt instruments and the role of global regulation. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update.*

FIN 6325 - Financial Management of Banking Institutions

Units: 4

Comprehensive treatment of commercial bank management in today's financial services industry. Modern approach to understanding and managing the risks faced by banks. Methods of optimizing shareholder value, risk-return tradeoffs, regulatory and strategic issues. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update.*

FIN 6375 - International Financial Management

Units: 4

Financial decision-making for multinational corporations, management of foreign exchange risk, foreign direct investment, multinational project evaluation, international diversification and risk-return analysis, international capital markets and capital structure. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update.*

FIN 6898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities within the quarter enrolled. *CR/NC grading only.*

FIN 6900 - Independent Study

Units: 1-4

FIN 6909 - Departmental Thesis

Units: 1-4

Development and writing of a research paper for submission to the department which specifies its format. Supervision by a faculty committee, at least one of whom must be a Cal State East Bay faculty member.

FIN 6910 - University Thesis

Units: 1-5

Development and writing of a formal research paper for submission to the University in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See "University Thesis Writing Guide," www.csueastbay.edu/thesiswritingguide.)

FIN 6999 - Issues in Finance

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in finance.

General Studies

GS 1010 - General Education Activities

Units: 1

Integrates thematic and basic subject course content. Builds communities to support attainment of expected G.E. course outcomes through group and individual strategies. Identifies learning styles of individual students. Integrates academic support services. Must be taken three times for credit, once each quarter of the frosh year. *A-F grading only.* Two hrs. act.

GS 1011 - General Studies Activities I

Units: 1

Orientation to the University and its services. Academic skill development in support of linked cluster course. Development of academic skills needed for success in college. Beginning development of students' portfolio. *Co-requisites: Concurrent enrollment in linked Freshman cluster and skill courses.* *A-F grading only.* Two hrs. act.

GS 1021 - General Studies Activities II

Units: 0.5

Academic skill development in support of linked cluster courses. Continued development of student portfolio. Focus on Career and Major exploration and freshman advising. Class meets first 7 weeks of the quarter. *Co-requisites: Concurrent enrollment in linked Freshman cluster courses.* *A-F grading only.* Two hrs. act.

GS 1031 - General Studies Activities III

Units: 0.5

Academic skill development in support of linked cluster courses. Continued development of student portfolio. Focus on academic planning, goal setting, and freshman advising. Class meets first 7 weeks of the quarter. *Co-requisites: Concurrent enrollment in linked Freshman cluster courses. A-F grading only.* Two hrs. act.

GS 1099 - Academic Decathlon

Units: 4

Directed independent study to help prepare area high school students to successfully participate in the United States Academic Decathlon Program. *Prerequisites: Consent of instructor. CR/NC grading only.*

GS 2500 - Peer Mentoring Practicum

Units: 2

Theory and practice of peer mentoring. Focus on developing mentoring role in the classroom and developing the competencies to work with instructors and students to increase the opportunities for academic success. *Prerequisites: Consent of instructor.* May be repeated for credit five times for a maximum of 12 units.

GS 3000 - McNair Scholars Seminar

Units: 1-4

Content varies with level of student Scholars ranging between the importance of graduate studies, researching appropriate graduate programs, preparing papers for conference submission, conference participation and presentation skills, applying to graduate school, GRE test-preparation, etc. *Prerequisites: Approval of McNair Scholars program faculty. Co-requisites: Participation in McNair program.* May be repeated for a maximum of 12 units. Only 8 units credit may be applied toward the degree. *CR/NC grading only.*

GS 3998 - Honors Research

Units: 1-4

Students in the University Honors Program work individually or in small groups with a faculty mentor on a research project. *Prerequisites: Admission to Honors Program, Junior standing or above. Maximum of 4 units applicable to degree.*

GS 3999 - Honors Seminar

Units: 1

Students in the University Honors Program present the results of their research projects to their peers. *Prerequisites: Admission to Honors Program, Junior standing or above, GS 3998.* May be repeated once for credit, for a maximum of 2 units.

GS 4010 - Tutoring for Learning: Theory and Practice

Units: 1-4

Introduces the dynamic processes of tutoring and learning. Surveys the literature on tutoring theory, and combines tutoring observation and experience in the university tutoring center to provide informed training for tutors or teachers. May be repeated for credit, for a maximum of 12 units.

GS 4999 - Senior Honors Thesis

Units: 1

Writing of a senior honors thesis in preparation for graduation from the University Honors Program. *Prerequisites: Admission to Honors Program; GS 3998, GS 3999; Senior standing.*

Geography

GEOG 2100 - Physical Geography

Units: 4

Major components of the physical environment, including landforms, climate, vegetation, and soils. Three hrs. lect., 2 hrs. act.

GEOG 2300 - Cultural Geography

Units: 4

Thematic introduction to the cultural systems operating to change the earth's surface; contemporary topics of human population, technology, social organization, spatial interaction, communication, and ideology. One half-day field trip required.

GEOG 2310 - Economic and Resource Geography

Units: 4

Location and linkages of economic activities as they relate to resource management. How goods and services produced by and for humans are geographically organized. Special emphasis on the historical antecedents of contemporary economic processes and international issues.

GEOG 2400 - Geography of World Development

Units: 4

Global wealth, poverty and inequality from a geographical perspective. Trends in important economic, environmental and sociocultural dimensions of world development. The who, why, and when and where aspects of the distribution of wealth at selected city, national and global scales.

GEOG 2600 - Introduction to GIS

Units: 4

See GEOL 2600 for course description.

GEOG 3000 - Sustainable Resource Management

Units: 4

The earth as a source of land, water, biotic, mineral and energy resources. The role of human populations in their use, sustainable development, and exploitation.

GEOG 3030 - Fundamentals of Geographic Information Systems

Units: 4

Fundamentals of location-related information management, manipulation, and display. Usage of commercially available GIS software in business; education; and physical, social and life sciences. Not open to students with credit for GEOG 4600. Two hrs. lect., 4 hrs. act.

GEOG 3115 - Physical Landscape Analysis

Units: 4

The geomorphic evolution of the landscape with emphasis on the last 3 million years. Processes and landscape histories, especially as they relate to climate, climatic change, and tectonics.

GEOG 3120 - Climate Change

Units: 4

Pre-modern and modern changes and variations in climate with emphasis on the geological, geomorphological, and biological records. Causes (natural and human-induced, including contemporary global warming) and consequences (natural and cultural) of climate change.

GEOG 3200 - Asian Americans: Spatial Disparity and Multiculturalism

Units: 4

Ethnic diversity and settlement patterns of Asian communities in California and the United States; immigration history and demographic changes of different Asian ethnic groups; socio-economic profiles, cultural identities, and contemporary issues of Asian Americans.

GEOG 3320 - Food, Culture and Environment

Units: 4

Origins and diffusion of agriculture, from its earliest practices to today's global food economy. Emphasis on ethno-cultural food choices and environmental consequences of cuisine and food supply from farm to market to table.

GEOG 3360 - Historical Geography of North America

Units: 4

Historical-geographic processes of exploration, migration, settlement, urbanization, cultural integration, land use and resource exploitation from the 15th through the 20th centuries.

GEOG 3405 - Field Regional Geography

Units: 1

Reconnaissance field study of geography of selected areas in California and adjoining regions. May be repeated but no more than two units may be applied to Geography major. *CR/NC grading only*. Thirty hrs. field/lab.

GEOG 3410 - Air-Photo Interpretation

Units: 4

The principles of airborne remote sensing and image interpretation for environmental resource management. Hands-on experience in photogrammetric stereoscopy and image measurement of spatial data. Two hrs. lect., 4 hrs. act.

GEOG 3450 - Literature and Research Methods

Units: 5

Seminar in the basic geographical and environmental literature, source materials and research methods. Intensive exercises in both written and oral communication. Fulfills the University Writing Skills requirement for students who began work on the present degree before Fall Quarter, 1985.

GEOG 3480 - Applied Field Studies

Units: 4

Field-based research project. Application of techniques and methods, including field observation, sampling, data collection, and computer-based analysis. Presentation of results in graphic and written forms. May be repeated once for credit with consent of instructor, for a maximum of 8 units. Cross-listed ENVT 3480. Two hrs. lect. 4 hrs. act.

GEOG 3500 - Geography of the United States and Canada

Units: 4

Systematic analysis of the distinctive human-use regions of the United States and Canada emphasizing their character, personality, and economic profile. Case studies of resource use dilemmas.

GEOG 3505 - Geography of California

Units: 4

The natural and cultural processes which have shaped the landscape of contemporary California. California's varied environments, especially how they have been perceived, modified, and significantly altered by humans.

GEOG 3540 - China and Japan

Units: 4

China and Japan as modern industrial powers. Comparative analysis of spatial patterns, economic development, natural resources, and social transformations that shape their respective cultural landscapes. Regional identities in the context of globalization.

GEOG 3550 - Geography of Southeast Asia

Units: 4

Physical resources, patterns of land use, economic development, and urbanization; problems and prospects of mainland and island countries from Myanmar to Indonesia and the Philippines. This region is an Islamic, Buddhist, Hindu, Christian cultural complex.

GEOG 3600 - Cartographic Principles and Graphic Communication

Units: 4

Fundamentals of map design and production. Emphasis on the humanistic and technical aspects of cartography. The essence of the map communication theory and gestalt theory of human perception; effective symbolization of spatial data. One hr. lect., 6 hrs. act.

GEOG 3605 - Computer Cartography

Units: 5

Introduction to the principles of modern digital cartography. Hands-on experience in computer mapping. Basic concepts, software, hardware of computer cartography; spatial data structure and database management; and lab-oriented software applications. *Prerequisites: GEOG 3600.* Two hrs. lect., 6 hrs. act.

GEOG 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least 2.0 GPA; departmental approval of activity. A maximum of 4 units will be accepted toward the Geography major; a maximum of 4 units will be accepted toward the Geography minor.* May be repeated for credit for a maximum of 8 units. *CR/NC grading only.*

GEOG 3999 - Issues in Geography

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in geography. May be repeated for credit when content varies, for a maximum of 8 units.

GEOG 4130 - Biogeography

Units: 4

(See BIOL 4130 for course description.)

GEOG 4320 - Energy and Society

Units: 4

Distribution of sources, production trends, use patterns, potentials of water, wind, volcanic, tidal, solar, and other sources of power; emphasis upon fossil fuels and nuclear energy. Cross-listed ENVT 4320.

GEOG 4330 - Sustainable Development

Units: 4

Oxymoron or achievable goal? The major forces that shape national resource and economic development. Case studies that examine experiences with bilateral and multi-lateral development assistance. The close relationship between sustainable development, economics, demography, resource geography and the environment.

GEOG 4350 - Water Resources and Management

Units: 4

The historical, geographical, legal, and economic bases for the distribution and allocation of water, stressing California and the arid West; the environmental impact of water use; past and current issues and controversies in water distribution and redistribution.

GEOG 4425 - Remote Sensing of Earth Environments

Units: 4

Introduction to remote sensing applications on earth resource management. Focus on non-photographic earth observation systems such as near-infrared, thermal-infrared, and radar. Principles of remote sensing; types of imaging systems; and digital image processing. Two hrs. lect., 4 hrs. act.

GEOG 4605 - Applications of GIS

Units: 5

Interdisciplinary applications of GIS technology on the mapping, monitoring, analysis, management and conservation of environmental resources such as water, land use, agriculture and wildlife. *Prerequisites: GEOG 3030.* Two hrs. lect., 4 hrs. act.

GEOG 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

Geography: Graduate

GEOG 6010 - Seminar on Research Theory and Philosophy of Geography

Units: 4

A search for common theory and philosophy in modern geography. Focus on proposal development with the intent of giving graduate students a framework for their thesis or project research development.

GEOG 6100 - Seminar in Physical Geography

Units: 3

Selected topics and directed research in physical geography based upon intensive readings, group discussion, and oral and written reports.

GEOG 6300 - Seminar in Cultural Geography

Units: 3

Selected topics and directed research in cultural geography based upon intensive readings, group discussion, and oral and written reports.

GEOG 6400 - Seminar in Historical Geography

Units: 3

Selected topics and directed research in historical geography based upon intensive readings, group discussion, and oral and written reports. Strongly Recommended: Strongly Recommended: GEOG 3360 or two upper division courses in history or consent of instructor.

GEOG 6500 - Seminar in Regional Geography

Units: 3

Selected regions of the world based upon directed research, group discussion, and oral and written reports.

GEOG 6660 - Seminar in Human Impacts on the Natural Environment

Units: 3

Selected topics in human/environment relationships and their effects upon landscape change and environmental problems.

GEOG 6780 - Seminar in Environmental Planning

Units: 4

Emerging developments in environmental planning; interactions between citizens and project proponents, governmental agencies and non-governmental organizations; collaborations for producing and implementing sustainability policies. Bay Area urban and regional focus. Field observations.

GEOG 6820 - Seminar in Sustainable Cities

Units: 4

Urban sustainability goals, progress, and process, evident from local, regional, and global initiatives. Off-campus site visits to Bay Area projects and forums when appropriate.

GEOG 6899 - Project

Units: 2

Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense may be required.

GEOG 6900 - Independent Study

Units: 1-4

GEOG 6909 - Departmental Thesis

Units: 1-5

Development and writing of a research paper for submission to the department which specifies its format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required.

GEOG 6910 - University Thesis

Units: 1-6

Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See also, "University Thesis Writing Guide," www.csueastbay.edu/thesiswritingguide.)

GEOG 6999 - Issues in Geography

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in geography. May be repeated for credit when content varies, for a maximum of 8 units.

Geology

GEOL 1000 - Earth Systems Science

Units: 5

Introduction to the nature and evolution of the solid Earth, hydrosphere, atmosphere and solar system. Emphasizes interdisciplinary thought and research. Not open to students with credit for GEOL 1001, GEOL 1002, GEOL 1003, GEOL 1005 or GEOL 1006. Not for credit toward Geology major. Four hrs. lect., 3 hrs. lab; field trip(s).

GEOL 1001 - Introduction to the Earth Sciences

Units: 4

Composition, structure and evolution of the earth. Interactions of lithosphere, hydrosphere, and atmosphere. Relations of geologic

systems, hazards, and resources to human environment and future. Not open to students with credit for GEOL 1000, GEOL 1003, GEOL 1005 or GEOL 1006.

GEOL 1002 - Earth Sciences Laboratory

Units: 1

Laboratory investigation of the Earth system: solid Earth, hydrosphere, atmosphere, and solar system. Geologic materials, maps, earthquakes, landslides, weather, oceans and currents, planets. Field trip. *Prerequisites: GEOL 1001 (or GEOL 1003, GEOL 1005, or GEOL 1006) or concurrent enrollment.* Not open to students with credit for GEOL 1000. Not for credit in Geology major. Three hrs. lab.

GEOL 1003 - How Earth Systems Work

Units: 4

How the earth's lithosphere, hydrosphere, and atmosphere work and the earth's place in the universe. Not open to students with credit for GEOL 1000, GEOL 1001, GEOL 1005 or GEOL 1006 .

GEOL 1005 - Earth Science

Units: 4

The earth's place in the universe with emphasis on how the earth's lithosphere, hydrosphere and atmosphere work. Not open to students with credit for GEOL 1000, GEOL 1001, GEOL 1003 or GEOL 1006.

GEOL 1006 - Earth Systems and Energy

Units: 4

Nature and evolution of solid Earth, hydrosphere, atmosphere and solar system. Emphasizes interdisciplinary thought and the role of energy in the Earth system and energy resources. Not open to students with credit for GEOL 1000, GEOL 1001, GEOL 1003 or GEOL 1005. Not for credit toward Geology major.

GEOL 1201 - Introduction to Oceanography

Units: 4

Origin of ocean basins, nature of the sea floor, physical/chemical characteristics of sea water, ocean currents, marine life, relationships between humans and the sea. Not for credit toward Geology major.

GEOL 1202 - Oceanography Laboratory

Units: 2

Introductory laboratory exercises in principles of oceanography, including distribution of temperature and salinity, currents, sea-floor topography, bottom sediments, waves and tides, and beach dynamics. *Prerequisites: Prior or concurrent enrollment in GEOL 1201. Not applicable to the Geology majors.* One hr. lect., two hrs. lab activity.

GEOL 2000 - Introduction to the Geology of California

Units: 4

The geologic history and development of California. Rocks, minerals and natural resources. Processes that shape California landforms. Plate tectonics, earthquakes, volcanism. Not for credit in Geology major.

GEOL 2101 - Physical Geology

Units: 5

Nature and distribution of earth materials, the processes by which the materials are formed and altered, and the nature and development of the landscape. Four hrs. lect., 3 hrs. lab.; one Saturday or Sunday field trip.

GEOL 2102 - Earth and Life Through Time

Units: 4

Principles of interpretation of earth history. Study of plate tectonics and sea-floor spreading as related to the development of continents, ocean basins, and mountain belts. Origin, evolution and diversification of life through time. Laboratory sessions include hands-on exercises with fossils. *Prerequisites: GEOL 2101 or equivalent.* Not open to students with credit for GEOL 3030. Three hrs. lect., 3 hrs. lab.; field trip(s).

GEOL 2210 - Environmental Geology

Units: 4

The interaction between geologic processes and human society. Topics include rock, mineral, water, and energy resources, volcanic hazards, earthquakes, landslides, floods, erosion, coastal processes, plate tectonics, geologic time, pollution problems and environmental management. Field trip(s). Recommended: Concurrent enrollment in GEOL 2211/ENSC 2211 (lab). Cross-listed ENSC 2210.

GEOL 2211 - Environmental Geology Laboratory

Units: 1

Hands-on investigation of topics including earth materials (minerals, rocks and soils), groundwater, water chemistry, earthquakes, and landslides. *Prerequisite or Co-requisite: GEOL 2210/ENSC 2210.* Cross-listed ENSC 2211. Three hrs. lab.

GEOL 2300 - Natural Disasters

Units: 4

Geologic processes and their effects on human populations. Topics include earthquakes, landslides, volcanic eruptions, coastal erosion, floods, atmospheric and water pollution. Designed for Physical Science G.E. students. Not open to students with credit in GEOL 2301. Not for credit in Geology major.

GEOL 2301 - Natural Hazards

Units: 4

Earth and human-induced processes and their effects on human populations. Topics include earthquakes, landslides, volcanic eruptions, coastal erosion, floods, severe storms, atmospheric and water pollution. Not open to students with credit in GEOL 2300. Not for credit in Geology major.

GEOL 2600 - Introduction to GIS

Units: 4

Use of Geographic Information Systems (GIS) for interpretation of spatial data and preparation of maps. Display and manipulation of vector and raster data, including point locations, street maps, boundaries, and satellite images. Map scale, projections, and coordinate transformations. Basic database queries. Principles of Global Positioning Systems (GPS). The course will include examples from several disciplines. Cross-listed GEOG 2600. Three hrs. lect., 3 hrs. lab.

GEOL 3011 - Foundational Earth Science

Units: 4

Emphasizes a system approach to the study of Earth Science through investigations of the solid Earth, hydrosphere, atmosphere and solar system. Designed to prepare teachers for the CSET General Science Subtest in Earth and Planetary Science with the goal of obtaining a Foundational Science Credential. *Prerequisites: GEOL 1000 or GEOL 1001.* Not for credit in Geology or Environmental Science majors.

GEOL 3012 - Foundational Earth Science Laboratory

Units: 1

Laboratory investigation of integrated Earth System Science including geology, atmosphere, oceanography and the solar system. Designed to prepare teachers for the CSET General Science Subtest in Earth and Planetary Science with the goal of obtaining a Foundational Science Credential. *Prerequisites: GEOL 1000 or GEOL 1002. Co-requisites: GEOL 3011.* Not for credit in Geology or Environmental Science majors. Three hrs. lab

GEOL 3040 - Weather and the Atmosphere

Units: 4

Utilization of physical science principles in the study of the structure and circulation of the atmosphere; weather and weather forecasting. Emphasis on aspects of interest to the prospective or in-service teacher. Not for credit in Geology major.

GEOL 3050 - Volcanoes and Plate Tectonics

Units: 4

Relationship of volcanism to plate tectonics. Catastrophes and volcanic hazards. Processes and products at historically active volcanoes worldwide: lava flows and domes, avalanches and mudflows, air-fall tephra, and pyroclastic flows and surges. Not for credit in Geology major.

GEOL 3060 - Exploring the Solar System

Units: 4

Comprehensive survey of the formation and structure of the solar system from the Earth Science perspective. Emphasis on results of recent planetary missions. Planets, moons, comets, asteroids, the sun, and the origin and search for extraterrestrial life in our solar system. Emphasis on the evolution, structure, and geology of planets and composition of planetary atmospheres. Not for credit in Geology Major.

GEOL 3080 - Earth Science Hands-On Laboratory

Units: 2

Opportunity to work with elementary and middle school students in a science teaching/learning environment infused with Earth Science content. Hands-on lessons provide early teaching experience in science for undergraduates exploring teaching as a career. GE Area B6, upper division science, is a 4-unit requirement. To complete the requirement, students must take an additional science 3080 course or an additional 4-unit course approved for B6. *Prerequisites: GEOL 1000*

GEOL 3100 - Geology of the Western National Parks

Units: 4

The geologic history of western North America (from the Pacific Coast through the Great Plains) as interpreted from the outstanding features preserved in the national parks and selected other park service areas. Not for credit in Geology major.

GEOL 3110 - Principles of Geomorphology

Units: 4

Landforms as products of diastrophism, volcanism, and surficial processes; morphogenetic regions of the earth and the effect of climate on the processes that shape them; rates and stages of landscape evolution and their dependence on time, process and structure. *Prerequisites: GEOL 2101 or equivalent.* Three hrs. lect., 3 hrs. lab.; field trip(s).

GEOL 3400 - General Oceanography

Units: 4

Biological, chemical, geological, and physical characteristics of the sea, including geology of the ocean basins, marine ecosystems, and waves and currents. *Prerequisites: GEOL 2101 or equivalent.* Three hrs. lect., 3 hrs. lab.; field trip(s).

GEOL 3401 - The Oceans

Units: 4

Comprehensive survey of biological, chemical, and physical oceanography. Marine geology, plate tectonics, ecosystems, ocean structure, water chemistry, waves and currents. Not open to students with credit for GEOL 1201 and GEOL 3400. Not for credit in Geology major.

GEOL 3500 - Environmental Hydrology

Units: 4

(See ENSC 3500 for course description.)

GEOL 3601 - Mineralogy and Optical Crystallography

Units: 5

Principles of mineralogy, crystal symmetry, structure, and chemistry. Elements of optical crystallography utilizing indicatrix theory. Laboratory emphasizes physical properties and identification of minerals in hand sample and thin section. *Prerequisites: Introductory chemistry and GEOL 2101 or equivalent.* Three hrs. lect., 6 hrs. lab/field.

GEOL 3701 - Igneous and Metamorphic Petrology

Units: 5

Characteristics, phase relations, and origin of igneous and metamorphic rocks. Plate-tectonic setting of magmatism and metamorphism. Laboratory emphasizes rock classification based upon hand-lens and microscopic examination of mineralogy and texture. *Prerequisites: GEOL 3601 or equivalent.* Three hrs. lect., 6 hrs. lab.; field trip(s).

GEOL 3801 - Sedimentology and Stratigraphy

Units: 5

Depositional systems and sedimentary processes. Facies models, succession, age relationships, and correlation of strata. Petrology and provenance of sedimentary rocks. *Prerequisites: GEOL 2102 and GEOL 3701.* Three hrs. lect., 6 hrs. lab.

GEOL 3810 - Structural Geology

Units: 5

Geometric, kinematic and dynamic analysis of structures of igneous, sedimentary and metamorphic rocks. Laboratory emphasis on descriptive geometry and stereographic solutions to structural problems; geologic maps and structure sections. *Prerequisites: GEOL 2101 or equivalent.* Three hrs. lect., 6 hrs. lab.; field trip.

GEOL 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least 2.0 GPA and departmental approval of activity.* May be repeated for up to 8 units. Not for credit in Geology major. *CR/NC grading only.*

GEOL 3910 - Geologic Field Methods

Units: 3

Introduction to geologic field methods and instruments, use of aerial photographs and topographic maps in geologic mapping, preparation of geologic maps of local areas. *Prerequisites: GEOL 3701, GEOL 3801, and GEOL 3810 (any of these courses may be taken concurrently).* One hr. lect., 6 hrs. field.

GEOL 3999 - Issues in Geological Sciences

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in geological sciences. May be repeated for credit when content varies, for a maximum of 8 units.

GEOL 4010 - Applied Geophysics

Units: 5

Geophysical methods for determination of subsurface geology, including seismic refraction and reflection, ground-penetrating radar, gravity, magnetism, and resistivity. Basic geophysical theory. Collection of geophysical data in the field and analysis on the computer. *Prerequisites: GEOL 2101, MATH 1304, and PHYS 2702 or consent of instructor.* Three hrs. lect., 6 hrs. lab.; field trip required.

GEOL 4020 - Seismic Exploration

Units: 4

Seismic exploration methods, including data acquisition, processing, modeling, and interpretation. Survey design, source and receiver types, selection of acquisition parameters. Static and gain corrections, deconvolution, velocity analysis, migration and inversion methods. *Prerequisites: GEOL 2101, MATH 1304, and PHYS 2701 or consent of instructor.* Not open to students with credit for GEOL 6020. Three hrs. lect., 3 hours lab.

GEOL 4130 - Survey of Geochemistry

Units: 4

Chemical evolution of the universe and earth, chemistry of rock formation, hydrothermal solutions and weathering. Isotopes and trace elements. *Prerequisites: GEOL 3601 (may be taken concurrently) and CHEM 1103 or equivalents.*

GEOL 4140 - Hazardous Waste Management

Units: 4

(See ENSC 4140 for course description.)

GEOL 4200 - Introduction to Planetary Science

Units: 4

Introduction to the formation and origin of the solar system. Celestial mechanics, stellar evolution, meteoritics, planetary interiors, surfaces, and atmospheres, moons, asteroids, comets, extraterrestrial life. *Prerequisites: GEOL 3601 or equivalent.*

GEOL 4320 - Hydrogeology

Units: 4

The hydrologic cycle, from precipitation, evapotranspiration, infiltration and runoff, to surface and groundwater. Hydrograph analysis, stream gaging and discharge determination. Groundwater occurrence, movement and evaluation. Hydrologic regions of U.S., emphasizing the western states. Field trip(s) *Prerequisites: GEOL 2101 or equivalent.* Three hrs. lect., 3 hrs. lab.

GEOL 4414 - Earthquake Geology

Units: 4

Aspects of earthquake geology, plate tectonic and geographic location of seismicity; the source region and rock mechanics and deformation; seismic waves; event dating techniques and tectonic geomorphology; fault types and behavior. *Prerequisites: GEOL 3801, GEOL 3810, or permission of instructor.* Not open to students with credit for GEOL 6414.

GEOL 4600 - GIS for Earth Sciences

Units: 5

An introduction to applications of Geographic Information Systems (GIS) to geology and other earth sciences. Designing, automating, and analyzing a spatial database; linking data sets; creating maps; generating reports and customizing ARC/INFO software. *Prerequisites: GEOL 2101 or permission of instructor.* Three hrs. lect., 6 hrs. lab.

GEOL 4800 - Seminar

Units: 2

Critical, in-depth study of selected topics of current and classical research in geology; topics not repeated in two-year interval. *Prerequisites: Senior standing or permission of instructor.* May be repeated, but no more than 6 units may be applied to Geology major.

GEOL 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units. *CR/NC grading only.*

GEOL 4910 - Senior Thesis

Units: 2

Independent research project with a written thesis, digital map, or similar final product to be completed by students desiring to graduate with a B.S. in geology with research experience (see department for guidelines). only. *Prerequisites: Senior level in Geology and thesis advisor's approval. CR/NC grading only.*

Geology: Graduate

GEOL 6020 - Seismic Exploration

Units: 4

Seismic exploration methods, including data acquisition, processing, modeling, and interpretation. Survey design, source and receiver types, selection of acquisition parameters. Static and gain corrections, deconvolution, velocity analysis, migration and inversion methods. Graduate research project required. Not open to students with credit for GEOL 4020.

GEOL 6030 - Earthquake Seismology

Units: 4

Methods for using seismic data from earthquakes to study geologic properties. Stress and strain, seismic raypaths, travel times, amplitude and phase, body and surface waves. Seismic source theory, including focal mechanisms and moment tensors. Earthquake location methods. Travel-time inversion methods for the determination of velocity structure. Seismic coda and attenuation. Array analysis. *A-F grading only.*

GEOL 6040 - Near Surface Geophysics

Units: 4

High-resolution seismic, ground penetrating radar (GPR), electrical resistivity, and magnetic methods. Digital terrain data and global positioning system (GPS). Geophysical data processing methods. *A-F grading only.*

GEOL 6300 - Quaternary Geology

Units: 4

Evolution of climate and landforms of the Quaternary. Emphasis on interpretation of sedimentary deposits and erosional landforms. Techniques for determination of age relationships.

GEOL 6310 - Isotope Geochemistry

Units: 4

The course focuses on using variations in the abundances of isotopes to understand natural processes. Applications of radioactivity and other nuclear reactions (radioactive/radiogenic isotope geochemistry), and chemical separation of isotopes (stable isotope geochemistry), will be covered.

GEOL 6320 - Groundwater

Units: 4

Groundwater resource evaluation methods. Mathematical development of multi-dimensional flow equations. Introduction to computer models and numerical simulation to predict aquifer yields. Inorganic and organic groundwater contamination. Contamination transport processes.

GEOL 6411 - Engineering Geology

Units: 4

Application of geology in location and planning of engineering works. Study of case histories. Use of geophysical techniques to solve engineering geologic problems.

GEOL 6412 - Advanced Igneous and Metamorphic Petrology

Units: 4

Chemical characteristics of igneous rocks and magmatic evolution. Petrography of igneous and metamorphic rock suites using the polarizing microscope, emphasizing thorough description of mineralogy and textures. *A-F grading only.*

GEOL 6414 - Earthquake Geology

Units: 4

Aspects of earthquake geology, plate tectonic and geographic location of seismicity; the source region and rock mechanics and deformation; seismic waves; event dating techniques and tectonic geomorphology; fault types and behavior. *Prerequisites:* GEOL 3801, GEOL 3810, or permission of instructor. Graduate research project required.

GEOL 6415 - Advanced Sedimentary Petrology

Units: 4

Advanced study of terrigenous-clastic and chemical sedimentary rock petrogenesis, including depositional environments and facies models, diagenesis, and basic analysis techniques. *A-F grading only.*

GEOL 6420 - Internship

Units: 1-4

Professional experience for at least one quarter with a public or private organization involved in geologic studies, summarized in a written report. *CR/NC grading only.*

GEOL 6430 - Tectonic Geomorphology

Units: 4

Effects of earthquakes on modern landforms; types of geomorphic markers and determination of their ages; geologic structures resulting from earthquakes; geodesy and deformation rates; deformation and geomorphology at different timescales. *A-F grading only.*

GEOL 6620 - Advanced Topics in Geology

Units: 4

Selected advanced topics in geology. May be repeated with consent of instructor.

GEOL 6811 - Graduate Seminar

Units: 2

Investigation of a selected geologic topic. May be repeated once for credit with consent of instructor, for a maximum of 4 units. Two hrs. seminar.

GEOL 6899 - Project

Units: 1-2

Development of an original product (e.g., manuscript, education module, field map, computer model) that is summarized in a written abstract. Both project and abstract are submitted to the department, which specifies their format. Supervised by a departmental committee. Oral defense may be required. May be repeated for credit, for a maximum of 4 units. *CR/NC grading only.*

GEOL 6900 - Independent Study

Units: 1-4

No more than 4 units may be applied toward the master's degree. *CR/NC grading only.*

GEOL 6910 - University Thesis

Units: 1-9

Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least two of whom must be Cal State East Bay faculty members. Oral defense required. (See also "University Thesis Writing Guide," www.csueastbay.edu/thesiswritingguide.) *CR/NC grading only.*

GEOL 6999 - Issues in Geological Sciences

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in geological sciences. May be repeated for credit when content varies, for a maximum of 8 units.

Health Care Administration: Graduate

HCA 6200 - US Health Care System

Units: 4

Major characteristics of the US health care system, its strengths and weaknesses, the roles of different stakeholders including providers, patients, policymakers and payers; the role of health insurance and its impacts, and definitions of health and health determinants. *A-F grading only.*

HCA 6201 - Introduction to Health Informatics

Units: 4

Topics include the use of information technology in various types of health-care settings and the main types of health information tools such as electronic health records, telehealth and mobile health and their related resources and applications. *A-F grading only.*

HCA 6202 - Project and Change Management in Health Informatics

Units: 4

Introduction to students to initiating and managing health informatics projects. Principles of project management, including initiating, planning, executing, monitoring, evaluating, and reporting as applied to health informatics. *A-F grading only.*

HCA 6203 - Quality Improvement Using Health Informatics

Units: 4

Issues of measuring, managing and improving the quality of health care using informatics. The impact of health informatics on patients and providers, communication, provider training, medical errors, and other relevant areas are discussed. *A-F grading only.*

HCA 6204 - Business, Legal, and Ethical Aspects of Health Informatics

Units: 4

Introduction to students to the unique business, legal, and ethical issues of using telehealth. Legal and regulatory requirements as well as ethical considerations for health informatics systems, such as FDA regulations and AHIMA, are discussed. *A-F grading only.*

HCA 6205 - Bioinformatics in Health Care Administration

Units: 4

Study of the basic concepts surrounding bioinformation systems. Course topics include bioinformation systems, terminology and standards, bioinformation, configuration, user interface design, computerized physician order entry, decision support, and clinical reporting. *A-F grading only.*

HCA 6206 - Public Health Informatics

Units: 4

Topics include the information needs of public health professionals; barriers and requirements of a public health information infrastructure; public health informatics tools; public health department credentialing; and public health electronic reporting and surveillance, including communicable disease and bioterrorism. *A-F grading only.*

HCA 6210 - Leadership and Change in Health Care Organizations

Units: 4

Issues and practices of health care administrators that impact leadership style. Emphasis on developing capacities for leading health organizations in a changing environment, in particular strategic planning, human resources management, facilitation, negotiation and collaboration skills, as well as those needed for innovation and creative management practice. *A-F grading only.*

HCA 6225 - Organization Theory and Behavior in Health Care

Units: 4

Explores the application of classical and emerging theories in organizational design, behavior, and effectiveness to health care organizations. Topics include organizational purpose, design, structure, change, power and politics; and the impact of internal and external factors on structure and design. *A-F grading only.*

HCA 6230 - Information Technology in Health Care

Units: 4

The impact of information systems on the design and delivery of health care; different information technologies; use of information systems in policy making and quality assurance and improvement; relationship of information technology to organizational design. *A-F grading only.*

HCA 6240 - Health Care Financing and Budgeting

Units: 4

Functioning of health care markets; impact of economic incentives on health care decision-making; U.S. health care financing; impact of uninsured; role of nonprofit organizations; impact of managed care model; forecasting expenditures; role of technology, prices, utilization rates, and demographics. *A-F grading only.*

HCA 6250 - Strategic Management of Health Care Organizations

Units: 4

Explores the application of strategic management principles to health care organizations. Topics include analyzing the external and internal environments, responding to change, developing mission and goal statements, strategy formulation, evaluation of strategic alternatives, and implementation. *A-F grading only.*

HCA 6260 - Health Care Policy Analysis

Units: 4

The health care policy process; impact of health care on broader social policy; influence of political and economic forces on health policies; impact of emerging models of health care such as community-based programs. Critical analysis of market-based models. *A-F grading only.*

HCA 6270 - Health Care Management

Units: 4

Develop the knowledge and skills needed to manage organizational resources: develop clear policies, position descriptions and expectations; build cohesive employee teams, coach and discipline employees, provide effective employee feedback and development, maximize advantages of diversity, and provide leadership. *A-F grading only.*

HCA 6275 - Evolution of Managed Health Care

Units: 4

Overview of managed health care organizations, including their history, evolution, regulation, and financing. The course explores issues that are common to most managed care organizations, including accreditation and performance measurement, compensation, use of incentives, and the regulatory environment. *A-F grading only.*

HCA 6280 - Legal and Ethical Issues in Health Care

Units: 4

Contemporary legal issues in health care administration. Overview of recent health legislation and regulations. Personal and organizational liability; ethical issues in health care administration. Impact of the market model on health care delivery. *A-F grading only.*

HCA 6290 - Health Care Quality Assessment and Improvement

Units: 4

Development of skills in evaluation methods and performance management with particular emphasis on the management of quality, standard setting, and performance assessment processes. Course includes historical beginnings, state-of-the-art voluntary and governmental efforts and proposed means of quality assessment and improvement. *A-F grading only.*

HCA 6893 - Internship in Health Care Administration

Units: 4

Academically challenging field placements in half-time or full-time positions with health care organizations under the supervision of university faculty member. Examination of the relationship of theory to practice in the health care field. *A-F grading only.*

HCA 6898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for credit, for a maximum of 4 units. *CR/NC grading only.*

HCA 6899 - Project

Units: 4

Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to

the department, which specifies their formats. Supervision by a departmental faculty member. Oral defense may be required. *A-F grading only.*

HCA 6900 - Independent Study

Units: 1-4

HCA 6999 - Issues in Health Care Administration

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in health care administration. May be repeated for credit when content varies, for a maximum of 8 units.

Health Sciences

HSC 1000 - Introduction to Health Professions Practice

Units: 4

Professional practice in preventive, curative and rehabilitative health care services. Accreditation, certification and licensing standards. State and Federal regulations on quality assurance and reimbursement policies. *A-F grading only.*

HSC 1100 - Health: Maintenance of Wellness

Units: 4

Analysis and application of the Wellness concept for healthful living. Instruction in techniques and procedure for self-care, self-examination, emergency care and efficient utilization of the medical care system. *A-F grading only.*

HSC 2001 - Environmental Factors in Health

Units: 4

Ecological principles applied to interactions between human and environmental systems and how each affects the health of the other. Strategies for preventing and managing environmental crises. *Not open to students with credit for HSC 3200. A-F grading only.*

HSC 2200 - Research and Writing in Health Care

Units: 4

Principles of writing for academic purposes to help health care professionals in practice. Topics covered will include composing abstracts for submission to present at professional conferences, papers for submission to a peer-reviewed journal, and writing literature reviews, position papers, and research proposals and grants to a funding agency. The student will acquire an understanding of the APA formatting and familiarity with how to access health data. *Prerequisites: ENGL 1002.* May be repeated once for credit, for a maximum of 8 units. *A-F grading only.*

HSC 2500 - Principles of Personal Nutrition

Units: 4

Consumer-oriented course on nutrition and food. Basic nutrients and food groups, food and health, food safety, food shopping. *Not open to students with credit for NURS 2010. A-F grading only.*

HSC 2510 - Introduction to Peer Health Education

Units: 3

Theory and practice of peer and community health education drawing from social science and public health disciplines. Exploration of issues and strategies in community health education. *Prerequisites: HSC 1100 or equivalent, or permission of instructor. A-F grading only.*

HSC 2550 - Peer Health Education Practicum

Units: 2-3

Supervised practicum in Student Health Services. Sequel and companion course to HSC 2510. *Prerequisites: HSC 2510.* May be repeated once for credit, for a maximum of 6 units. *A-F grading only. 6 to 9 hours/week activity.*

HSC 3100 - Introduction to Global Health

Units: 4

Overview of issues in global health with an emphasis on economically less developed countries. Prevention, transmission, pathology, and treatment of diseases such as tuberculosis, SARS, malaria, and HIV/AIDS and public health measures used to control these problems will be addressed. *A-F grading only.*

HSC 3200 - Environmental Health

Units: 4

The relationship of the environment to people's health. *Not open to students with credit for HSC 2001. A-F grading only.*

HSC 3250 - Genes and Human Health

Units: 4

Focus on gene structure, organization, mode of action, replication, inheritance, evolution, and how this affects human health. Advanced topics in genomics and resulting therapeutic technologies including gene cloning, stem-cells, gene screening and therapy will be explored. *Prerequisites: BIOL 1001 or equivalent, consent of instruction, and at least a 2.00 GPA. A-F grading only.*

HSC 3300 - Health Care Systems in the U.S.

Units: 4

Overview of systems and organization of US health care, including introduction to current issues. Includes inpatient, outpatient, public health, financing, provider types, and general services provided. *A-F grading only.*

HSC 3350 - Health Legislation and Government Programs

Units: 4

Current Federal and State health legislation, regulations, and standards, and their effect on professional practice. Historical development of various health programs and their current status. *Prerequisites: HSC 3300. A-F grading only.*

HSC 3400 - Community Health

Units: 4

Health issues facing today's communities. Topics such as epidemiology, community organization, program planning, minority

health, elders, mental health, school health, drugs, safety, and occupational health are covered. *Prerequisites: PSYC 1000 or PSYC 1005.* A-F grading only.

HSC 3410 - Epidemiology for Health Sciences

Units: 4

Introduction to the quantitative techniques employed in modern epidemiology to design and interpret relevant studies. Overview of approaches and the statistical methods used to conduct epidemiological research. Familiarity with analytic processes commonly found in the health professions, including descriptive statistics, probability, probability distributions, point and interval estimation, hypothesis testing, chi-square, correlation and regression. *Prerequisites: BIOL 1000, STAT 1000.* A-F grading only.

HSC 3550 - Health Care Law and Ethics

Units: 4

An overview of legal and ethical issues encountered by the health care community and practitioners. Regulation, malpractice, business interactions, informed consent, advanced directives and the right to die, reproductive issues and genetic research will be explored from both the legal and ethical perspective. *Prerequisites: HSC 1000, HSC 3300 and HSC 3350.* A-F grading only.

HSC 3690 - Health Economics and Public Policy

Units: 4

Economics of health and healthcare. Application of economic theories to public policy in health sector. Cost analysis, healthcare financing, public and private health insurance, and provider reimbursement models. Analysis of medical education, hospital, pharmaceutical, mental health, and long-term care markets. *Prerequisites: ECON 2301, HSC 3300.* Cross-listed ECON 3690. A-F grading only.

HSC 3700 - Health Behavior and Health Education Theory

Units: 4

Health behavior and health education theories that drive health-behavior change interventions and programs. The analysis and application of these theories as they relate to health promotion and education practices are addressed. *Prerequisites: HSC 1100 or equivalent.* A-F grading only.

HSC 3720 - Medical Humanities

Units: 4

Introduction to the role of culture in health. Exploration of the importance of humanities in developing empathy, observation and self-reflection-skills necessary in health care. Human experience of illness will be explored. *Prerequisites: ANTH 1000 or SOC 1000.* A-F grading only. *Hybrid course.*

HSC 3800 - Multicultural Issues in Health Care

Units: 4

The complex transcultural issues surrounding delivery and acceptance of health care. Impact of cultural values and ethnicity on understanding health and illness, and the utilization of health care services. Concepts and definitions of culture, ethnicity, traditional health beliefs, health and illness. *Prerequisites: SOC 1000, or SOC 1002, or ANTH 1000 or permission of instructor.* A-F grading only.

HSC 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least a 2.0 GPA; departmental approval of activity. A maximum of 8 units will be accepted toward the Health Sciences major. May be repeated for credit for a maximum of 8 units. CR/NC grading only.*

HSC 3999 - Issues in Health Sciences

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in health sciences. *May be repeated for credit when content varies, for a maximum of 8 units. A-F grading only.*

HSC 4010 - Research and Program Evaluation in Health Science

Units: 4

Use of scientific research methods to evaluate efficacy of public health prevention programs. Computer lab time included. *Prerequisites: Permission of instructor. A-F grading only. All 3000-level courses in Health Science and 24 elective units in option area must be completed before taking this course.*

HSC 4500 - Supervised Field Training and Report Writing

Units: 3

A supervised internship field experience in a health or health-related setting. Ninety hours fieldwork total. *Prerequisites: Graduating senior status, and permission of instructor. A-F grading only. All major requirements, except HSC 4700, and all elective units must be completed before taking this course. Application required. Please visit Health Science website.*

HSC 4600 - Health Systems Management

Units: 4

Theory and practice of managing integrated systems. Critical review of key changes in evolution of health care organizations. Impact of changes on functions of management; approaches to governing health care organizations. *Prerequisites: Permission of instructor. A-F grading only. All HSC courses numbered lower than 4500 must be completed before taking this course.*

HSC 4650 - Advanced Principles of Health Care Management

Units: 4

Course Content: Provides students with advanced principles of health care management. Designed to prepare students for upper-level management roles in healthcare organizations. *Prerequisites: HSC 4600. A-F grading only.*

HSC 4700 - Senior Seminar

Units: 4

Capstone course. Integration and synthesis of knowledge, skills and internship work. *Prerequisites: Graduating senior status, and permission of instructor. A-F grading only. All Health Science courses required for the major and 28 elective units in option area must be completed before taking this course. Application required. Please visit Health Science website.*

HSC 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

History

HIST 1014 - World Civilizations I

Units: 4

To ca. 800. Neolithic revolution. River Valley civilizations: Egypt, Mesopotamia, India, China. Ancient Hebrews. The Mediterranean: Hellenic, Hellenistic, and Roman civilizations. Emergence and spread of Christianity and Islam. Gupta India. Not open to students with credit for HIST 1017.

HIST 1015 - World Civilizations II

Units: 4

Ca. 800 to ca. 1700. Empires and civilizations: Sung China, Japan, West Africa, Byzantium, Abbasid Iraq and Islamic Spain, Aztecs and Incas, Christian Europe and feudalism. Eurasian migrations. European self-transformation and expansion. Monarchic states and market economies. Scientific revolution. Not open to students with credit for HIST 2018.

HIST 1016 - World Civilizations III

Units: 4

Ca. 1700 to present. European absolutism. Enlightenment and democratic revolutions. Industrial capitalism and social transformation. Liberalism, conservatism, nationalism, socialism. Imperialism in East Asia, India, Middle East, Africa. Second scientific revolution. World Wars, Communism, Fascism. Cold War and end of colonialism. Not open to students with credit for HIST 2019.

HIST 1017 - Ancient World Civilizations

Units: 4

An overview of ancient world civilizations throughout the medieval period. Egypt, Mesopotamia, India, China. Ancient Hebrews. Hellenic, Hellenistic, and Roman civilizations and the emergence and spread of Christianity and Islam. Not open to students with credit for HIST 1014.

HIST 1101 - History of the United States to 1877

Units: 4

A survey of the development of the American nation from colonial times to the close of Reconstruction. This course, when combined with credit for History 1102, meets statutory requirements in U.S. History, U.S. Constitution, and California State and Local Government.

HIST 1102 - History of the United States Since 1877

Units: 4

A survey of American history from Reconstruction to the present. This course, when combined with credit for History 1101, meets statutory requirements in U.S. History, U.S. Constitution, and California State and Local Government.

HIST 2010 - Introduction to History

Units: 4

Seminar on historical study as academic discipline. Focus on historical argument, interpretation of evidence and sources, source

citation, and oral expression. Introduction to historical writing, historiography, and library and Internet research. Not open to students who have taken HIST 1000.

HIST 2040 - Humanity, Science and Nature in History

Units: 4

Attitudes toward humanity's place in the natural world as revealed in historical documents from Classical times to the present. The rise of science and the Romantic reaction. The development of modern environmental concerns in historical context. Not for use in the History major. *A-F grading only.*

HIST 3010 - Historical Writing

Units: 4

Seminar on writing and revision of reviews, essays, and research papers through study of selected historical topics. Emphasis on form, argument, organization, source citation, and oral presentation. *Prerequisites:* HIST 2010.

HIST 3017 - The Twentieth Century

Units: 4

World history from WWI to Soviet collapse, focusing on diplomacy, economics, and political/social trends. The world wars, Russian revolution and Stalinism, fascism and Nazism, Chinese Revolution, Cold War, decolonization and end of Western hegemony, globalization of world economy.

HIST 3100 - Ancient Egyptian Civilization

Units: 4

Survey of ancient Egyptian history, civilization, art, and religion from about 3100 B.C. to the conquest by Alexander the Great (332 B.C.).

HIST 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites:* At least 2.0 GPA; departmental approval of activity. A maximum of 5 units will be accepted toward the History major. May be repeated for credit for a maximum of 5 units.

HIST 3999 - Issues in History

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in history. May be repeated for credit when content varies, for a maximum of 8 units.

HIST 4010 - History Internship

Units: 4

Supervised work that integrates academic learning and field experience. Introduces students to various career tracks in the historical profession. *Prerequisites:* HIST 3010; 3.5 major GPA; consent of instructor and partnering agency. May be repeated once for credit with consent of instructor, for a maximum of 8 units. *CR/NC grading only.*

HIST 4030 - Historiography

Units: 4

Development of historical writing from antiquity to present. Emphasis on Herodotus, Thucydides, St. Augustine, Vico, Hegel, Marx, and 20th century historians. Survey of other significant historians. *Prerequisites: Senior standing and HIST 1014-HIST 1015-HIST 1016, HIST 2010, and HIST 3010 or consent of instructor.*

HIST 4031 - Historical Research Methods

Units: 4

Seminar on advanced historical research through preparation of research paper based on primary sources. *Prerequisites: Senior standing; HIST 1014-HIST 1015-HIST 1016, HIST 2010, and HIST 3010 or consent of instructor.*

HIST 4032 - Introduction to Public History

Units: 4

The use of historical theory and method in non-academic settings, including museums, archives, consulting organizations, historical societies, government agencies, business, and historical preservation projects. Field trips to selected non-academic settings.

HIST 4033 - Introduction to Teaching History

Units: 4

Seminar in teaching history at the K-16 level. The course presents an overview of the way history has been taught in the U.S.; a survey of current pedagogical trends; use of primary sources in the history classroom; methods for developing curriculum. May not be used to replace HIST 4030 or HIST 4031 in the History Major. *Prerequisites: HIST 3010.*

HIST 4500 - The California History/Social Science Framework

Units: 1

Content review of California K-12 History-Social Science Framework for prospective teachers. Enrollment only in final quarter of Subject Matter Preparation Program in Social Science. Not for credit in History major or minor.

HIST 4710 - History and Trends in Nursing

Units: 4

Survey of the development of modern nursing. Emphasis on social trends that have influenced the development of nursing; the Judeo-Christian tradition; the military heritage; the women's movement; developments in health care delivery.

HIST 4900 - Independent Study

Units: 1-4

Supervised study. *Prerequisites: Consent of instructor.* May be repeated for credit with consent of instructor, for a maximum of 12 units.

History: Asia

HIST 3302 - Modern East Asia Through Film

Units: 4

Individualism, gender relations, family life, nationalism, and imperialism in 19th and 20th century China, Japan, and Korea through films produced in East Asia and elsewhere.

HIST 3303 - Precolonial India

Units: 4

Ancient and medieval South Asia (Indian subcontinent) from Indus Valley Civilization to 18th century. Hinduism and Buddhism; introduction of Islam and formation of Indo-Muslim society; religious and ethnic communities; creation of states and empires; arrival of Europeans.

HIST 3305 - Modern South Asia

Units: 4

History, culture and political economy of the Indian subcontinent from the seventeenth century to present. Decline of Mughal empire, British colonial conquest, anti-colonial resistance, nationalism and religious identity, Gandhi, independence, post-colonial India, Pakistan, and Bangladesh.

HIST 3307 - Modern India through Film

Units: 4

The history of nation, class, caste, gender, sexuality, community, and diaspora as documented in Indian film. Special focus on Bollywood. Weekly readings and discussions.

HIST 3311 - Traditional China

Units: 4

China from classical antiquity to the 19th century; intellectual trends, political developments, and social changes.

HIST 3312 - Modern China

Units: 4

China from the Opium War to 1949. The collapse of imperial China, Western incursions, the emergence of modern culture, and the roots of the Communist revolution.

HIST 3313 - People's Republic of China

Units: 4

The socialist experience in China from 1949 to the present: the leadership of Mao Zedong, the Cultural Revolution, and changes in urban and rural areas in the post-Mao era.

HIST 3322 - Early Japan

Units: 4

Cultural, social, and political history of Japan to 1800. The aristocracy, the samurai, and the impact of Asian continental culture.

HIST 3323 - Modern Japan

Units: 4

Japan as an industrial and imperialist power from traditional foundations to defeat in World War II. Modern culture, party politics, and social problems.

HIST 3325 - Postwar Japan

Units: 4

The political, social, and cultural dimensions of Japan's transformation from defeated nation in 1945 to world economic power today.

HIST 3340 - The Middle East and Rise of Islamic Societies

Units: 4

Middle East from 600 to 1750. Beginnings of Islam; establishment of Muslim rule from Spain to Central Asia; emergence of Islamic civilization and contributions by non-Muslims; religious, political, and intellectual debates; contacts with Europe and Asia; establishment of Turkish power.

HIST 3345 - The Modern Middle East

Units: 4

Emergence of states and societies of the modern Middle East. Disintegration of pre-modern empires and evolution of traditional societies into modern nation-states of the Arab world, Turkey, and Iran; response to Western colonialism; socio-religious reform; Islam and nationalism; pan-Arabism; militant Islam.

HIST 3803 - Topics in Asian History

Units: 4

Reading, discussion, and research on selected topics in Asian history. May be repeated for credit when content varies.

History: Europe

HIST 3005 - Frankenstein: The Making of a Myth

Units: 4

Mary Shelley's classic tale Frankenstein against the background of the Romantic movement. The Frankenstein story in literature, film, and other forms of popular culture as a critical insight into modern science and technology.

HIST 3107 - History of Ancient Greece

Units: 4

From the Bronze Age to Alexander the Great. The Homeric World; the development of the city-state; classical thought and culture; the Persian and Peloponnesian Wars; the rise of Macedon.

HIST 3108 - History of Ancient Rome

Units: 4

Politics and society in Rome from foundation to AD 565. Etruscans; Republic and Punic Wars; Julius Caesar; Age of Augustus, and the pax Romana; paganism and Christianity; barbarian incursions; decline of empire in the West. Not open to students with credit for HIST 3109 or 3110.

HIST 3114 - History of Early Christianity

Units: 4

Topics of study include the Jewish and Roman backgrounds, the historical Jesus, the influence of Paul, and the development of Christian institutions in the first four centuries.

HIST 3123 - History of Medieval Christianity

Units: 4

The Christian faith and its institutions from ca. 500 to ca. 1500: development of church hierarchy, monasticism, conflicts between secular and ecclesiastical authority, the medieval university, theology, maintaining an orthodox faith, and Christianity as perceived and practiced by ordinary Christians.

HIST 3125 - Women in Medieval and Early Modern Europe

Units: 4

Women's political, economic, religious, domestic, and educational spheres in medieval and early modern Europe. Includes primary sources and emphasis on historical interpretation.

HIST 3127 - Europe in the Early Middle Ages

Units: 4

European society and politics, 300-1150. Fall of Rome; Germanic kingdoms; Benedictine monasticism; rise of the papacy; pagans and conversion; Carolingian Renaissance; Viking invasions; Gregorian Reform.

HIST 3128 - Europe in the Later Middle Ages

Units: 4

European society and politics, 1150-1400. Popular religion; the Crusades; heresy and the Inquisition; kings and law; growth of towns and trade; bubonic plague and dissolution of the medieval order.

HIST 3130 - Renaissance and Reformation Europe

Units: 4

Europe, 1350-1550. Politics, economics, arts, humanism, and science in the Renaissance; the Protestant and Catholic Reformations. Not open to students with credit for HIST 3131.

HIST 3150 - Early Modern Europe, 1550-1789

Units: 4

Wars of religion, constitutional and absolutist struggles and the resulting political philosophies; age of exploration and discovery; intellectual and technological effects of the scientific revolution; age of Enlightenment.

HIST 3160 - Europe in the 19th Century

Units: 4

The Revolutionary and Napoleonic legacy; Romanticism, Liberalism, and Socialism; the Revolutions of 1830 and 1848; Nationalism and the consolidation of states; Darwinism and its social ramifications; European imperialism and the First World War.

HIST 3170 - Europe in the 20th Century

Units: 4

Europe's tumultuous century. Two World Wars; rise and fall of fascism and Communism; decolonization; changing attitudes toward social class, sexuality, and the family.

HIST 3223 - History of the Soviet Union

Units: 4

The revolutionary movement in Russia, Marxism-Leninism, the Provisional Government and the Bolshevik coup, domestic and foreign affairs under Lenin and his successors.

HIST 3224 - The Cold War

Units: 4

History of the Cold War from 1939 to the fall of the Berlin Wall in 1989.

HIST 3230 - Science and Medicine to 1700

Units: 4

Major developments in Western science, medicine, and natural history from antiquity through the seventeenth century. Examines early attempts by philosophers, mathematicians, and physicians to understand nature and the human body. Origins of the scientific method.

HIST 3801 - Topics in European History

Units: 4

Reading, discussion, and research on selected topics in European history. Repeatable for credit when content is different.

History: Graduate

HIST 6010 - Seminar in History

Units: 5

Historical methodology including critical analysis and use of source materials, research and writing. Investigation of selected topics in political, economic, diplomatic, intellectual, and social history. Reports and discussion.

HIST 6030 - Graduate Historiography

Units: 4

Intensive readings in the classics of historical writing and the philosophy of history. Written critical analyses, both in- and out-of-class, are required.

HIST 6050 - History Graduate Portfolio

Units: 4

Preparation of professional portfolio of graduate work; presentation of original research in oral form suitable for conference participation; evaluation of work by class; revision of HIST 6010 or capstone work for consideration for publication in graduate e-journal; digital literacy.

HIST 6100 - Conference Course in Ancient and Medieval History

Units: 4

Readings and discussion in the significant historical literature of ancient and medieval Europe emphasizing the chief areas of historical controversy and interpretation. Study of the major historians. May be repeated once for credit with other professors, for a maximum of 8 units.

HIST 6200 - Conference Course in European History

Units: 4

Readings and discussion in the significant historical literature of modern Europe emphasizing the chief areas of historical controversy and interpretation. Study of the major historians. May be repeated once for credit with other professors, for a maximum of 8 units.

HIST 6300 - Conference Course in Asian and Middle Eastern History

Units: 4

Readings and discussion in the significant historical literature of Asia emphasizing the chief areas of historical controversy and interpretation. Study of the major historians. May be repeated for additional credit with other professors, for a maximum of 8 units.

HIST 6400 - Conference Course in United States History

Units: 4

Readings and discussion in the significant historical literature of the United States emphasizing the chief areas of historical controversy and interpretation. Study of the major historians. May be repeated for credit with other professors, for a maximum of 16 units.

HIST 6898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. May be repeated for credit for a maximum of 5 units.

HIST 6899 - Project

Units: 1-4

Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense may be required.

HIST 6900 - Independent Study

Units: 1-4

May be repeated for credit, with consent of History Graduate Coordinator, for a maximum of 12 units.

HIST 6901 - Internship in Public History

Units: 1-5

Supervised field work in non-academic settings, such as museums, libraries, archives, private business and government agencies, or historical preservation programs. May be repeated for credit, for a maximum of 5 units.

HIST 6905 - Directed Readings in History

Units: 1-4

Selected readings in consultation with two faculty members in preparation for the Master's Comprehensive Written Examination in history. The reading list and the exams must be consistent with the student's areas of concentration and approved by the faculty mentors.

HIST 6909 - Departmental Thesis

Units: 1-4

Development and writing of a research paper for submission to the department which specifies its format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required.

HIST 6910 - University Thesis

Units: 1-8

Development and writing of a formal research paper for submission to the University in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See also "University Thesis Writing Guide," www.csueastbay.edu/thesiswritingguide.)

HIST 6999 - Issues in History

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in history. May be repeated for credit when content varies, for a maximum of 8 units.

History: Latin America

HIST 3600 - Colonial Latin America

Units: 4

Relations among the colonists, Crown, Church, and Indians during and after the Spanish conquest. The catastrophic fall in the Indian population, the rise of the great estate, and the decline of Iberian power in the New World at the end of the eighteenth century.

HIST 3605 - Modern Latin America

Units: 4

Latin American history from 1810 to 1950. Emphasis on process of independence, state formation, national consolidation, and neocolonialism in the nineteenth century. The rise of nationalism and social revolution after 1910.

HIST 3622 - Mexico Since 1810

Units: 4

The development of Mexico from the wars of independence; evolution of political, economic, and social institutions.

HIST 3632 - Film and Society in Latin America

Units: 4

Film as a reflection of major themes and issues in Latin America, e.g., slavery and race relations, women's role in society, emergence of the military as a dominant political force, U.S. attitudes toward Latin America.

HIST 3804 - Topics in Latin American History

Units: 4

Reading, discussion, and research on selected topics in Latin American history. May be repeated for credit when content varies.

History: United States

HIST 3400 - America to 1900

Units: 4

Survey from colonial times to 1900. For partial fulfillment of subject matter preparation in history and social science for the multiple-subject teaching credential. Not for history major credit.

HIST 3411 - Colonial America

Units: 4

Development of the British mainland colonies from frontier societies to the Age of the American Revolution. Topics include Native American background, European expansion, regional variation, mercantilism, slavery, cultural diversity, and the rise of colonial political institutions.

HIST 3412 - The American Revolution

Units: 4

The creation of the American republic, 1763-1800. Imperial politics, loyalism, and the war; postwar changes in constitutions, politics, slavery, gender relations, and the frontier.

HIST 3413 - The New Republic

Units: 4

The expansion of the new republic, 1800-1850. Democratic politics, early industrialization, the Cotton South, reform movements, the Mexican-American War, and California.

HIST 3414 - Civil War and Reconstruction

Units: 4

The Civil War and American society, 1850-1877. Causes, content, and consequences of America's bloodiest conflict.

HIST 3415 - America in the Age of Empire

Units: 4

The rise of imperial America, 1877-1920. Industrialism, mass immigration, urbanization, populism, progressivism, foreign expansion, and World War I.

HIST 3416 - The Great Depression and World War II

Units: 4

The modernization of the United States, 1920-1945. The modernist 1920s, origins and impact of the Great Depression, the New Deal, mass culture, World War II and mass mobilization.

HIST 3417 - Cold War America

Units: 4

The United States in the postwar era, 1945-1989. Prosperity, anticommunism, the Civil Rights Movement, Vietnam and the 1960s, Watergate, internationalism, and the end of the Cold War.

HIST 3500 - History of California

Units: 4

California history from early days to the present, emphasizing the influence of geography, natural resources, and a growing population. Satisfies requirement in California state and local government.

HIST 3503 - History of the San Francisco Bay Area

Units: 4

The settlement of the Bay Area from the Indian period through the twentieth century, stressing the influence of natural environment, population growth, ethnic assimilation, transportation, urbanization, and economic development on the evolution of a regional culture.

HIST 3505 - California Environmental History

Units: 4

California environmental history from the Indian period to the present. Varying interactions between human societies and the natural environment, the deterioration and exhaustion of natural resources, and recent efforts to promote greater environmental balance.

HIST 3511 - The American West

Units: 4

Westward expansion of the United States from 1763 to 1900; development of western states and effect on the history of the nation.

HIST 3515 - Mexican Americans and the West

Units: 4

The historical evolution of northern Mexico. Acquisition of the Southwest by the United States. Social, economic, and political development of region, with emphasis on the role and social condition of the Mexican-American people.

HIST 3517 - The Immigrants' West

Units: 4

The movement and interaction of diverse ethno-racial groups within the American West, focusing on the 19th and 20th centuries. Indigenous peoples, Hispanic-Anglo frontier, trans-Pacific migration, exclusion and restriction, Depression-era migrants, inter-racial mixing, the new western immigration.

HIST 3530 - The Shaping of North America, 1492-1850

Units: 4

Major topics in the formation of North American societies, including Native American peoples, impact of European expansion, Africans in the West Indies, environmental transformation, creation of U.S. and California. Visual documentation of North American cultures.

HIST 3535 - American Indian History

Units: 4

Pre-contact to the present. The diversity of native life in North America; engagement and conflict with Europe; responses to the territorial expansion of the United States; the persistence of Indian communities; political and legal issues in Indian Country.

HIST 3538 - American Indians in the 20th Century

Units: 4

1890 to the present. American Indian life at the turn of the 20th century; colonization and responses; political relationship to the United States government; cultural and political resurgence; the development of the legal and political doctrine of tribal sovereignty.

HIST 3547 - The United States and Modern War

Units: 4

The experience of United States men and women in modern war from 1861 to the present. Why people go to war, soldiers' daily life, combat experiences, technology of warfare, life on the home front, and war in literature and film.

HIST 3550 - The History of U.S. Foreign Relations

Units: 4

Selected problems of American foreign relations, including the American Revolution, expansion and conflict, isolationism and internationalism, the Cold War and terrorism. Consideration of the State Department and of diplomatic practice in their historical context.

HIST 3553 - Modern American Thought and Culture

Units: 4

Intellectual, political, and cultural ideas, ideologies, and movements in twentieth-century United States. Focus on Progressivism, Pragmatism, the Romantic Left, Socialism, Unionism, Utopianism, Liberalism, the New Left, and Conservatism.

HIST 3557 - Digging in the Dirt in American History

Units: 4

A cultural and environmental history of gardens in the US used to discuss larger concepts of environmental justice, food politics and sustainable agriculture.

HIST 3570 - The Family and Sexuality in American History

Units: 4

Development and diversity of family life in U.S. from pre-colonial beginnings to present. Regional and racial family patterns;

responses to urbanization and industrialization; African American families during and after slavery; development of companionate family; changing role of families.

HIST 3571 - Women in American History

Units: 4

Survey of female gender roles and women's contributions to and place in the social, economic, and political life of the nation from colonial times to the present across ethnicity, race, and class.

HIST 3572 - American Women in the Twentieth Century

Units: 4

A multicultural exploration of the revolutionary changes in female gender roles and women's lives. Topics include the ballot box, social movements, the workplace, family and sexuality, the military, and popular culture, with attention to continued inequalities.

HIST 3575 - Baseball in America

Units: 4

The history of baseball and its role in American Society. Nineteenth century origins of the game, the major and minor leagues, amateur baseball from universities to prisons, the Negro leagues and integration, labor relations and cultural influences.

HIST 3802 - Topics in United States History

Units: 4

Reading, discussion, and research on selected topics in United States history. May be repeated for credit when content varies.

Hospitality and Tourism

HOS 1100 - Introduction to Hospitality and Tourism

Units: 4

Establish the basic knowledge about hospitality and tourism including travel, roles in the industry, sector functions, history of travel and tourism. Explore the cultural, environmental, and economic impacts of tourism and hospitality on localities, regions, and countries. *A-F grading only.*

HOS 3999 - Issues in Hospitality and Tourism

Units: 4

Readings, discussion, research, and applications on contemporary and/or significant issues in Hospitality and Tourism. May be repeated for credit when content varies, for a maximum of 8 units.

HOS 4502 - Special Events Management 2

Units: 4

Planning and implementing of special events. Topics include event planning, coordination, research, marketing, revenue generation, sponsorship, programming, media relations, volunteers, risk management, and evaluation. May be repeated once for credit, for a maximum of 8 units.

HOS 4505 - Hospitality Information Technology

Units: 4

Examination of technology-based systems in the hospitality industry including global distribution systems, yield management, property management, etc. Investigation of information technology to solve problems and strategically plan for the future.

Prerequisites: REC 1000, HOS 1100, REC 2050, REC 2400 or REC 3000 or permission of instructor.

HOS 4510 - Lodging Management

Units: 4

Examines the physical aspects of hotel operations including, development, classification, organization, management concepts and career opportunities in hotel administration. All phases of hotel administration are examined through case studies, class discussions, lectures and class assignments. This is a project oriented course. *Prerequisites: REC 1000, HOS 1100, REC 2050, REC 2400 or REC 3000 or permission of instructor.* (Formerly REC 4510.)

HOS 4520 - Promotion of Leisure and Hospitality

Units: 4

Analysis and application marketing for leisure and hospitality organizations. Emphasis on hospitality marketing: specifically on people, product, price, place, partnership, programming, package, and promotion. Evaluation of customers' needs, competition and organizational analysis including current trends. The students will participate in a sales blitz. *Prerequisites: REC 1000, HOS 1100, REC 2050, REC 2400 or REC 3000 or permission of instructor.* (Formerly REC 4520.)

HOS 4530 - Principles of Meetings, Conventions and Special Events

Units: 4

Examination of the process of planning, promoting, marketing, budgeting and implementing meetings, conventions, expositions and special events, including trade and consumer shows. Each industry segment and its relationship to other segments is reviewed, after which the entire industry is examined. *Prerequisites: REC 1000, HOS 1100, REC 2050, REC 2400 or REC 3000 or permission of instructor.* (Formerly REC 4530.)

HOS 4540 - Fiscal Leadership for Operational Managers

Units: 4

Introduction for non-financial students to the financial aspects of the hospitality industry. Students will learn how to read financial statements, prepare budgets, forecast costs, and revenue management. *Prerequisites: REC 1000, HOS 1100, REC 2050, REC 2400 or REC 3000, ACCT 2251 or the equivalent, or permission of instructor.* (Formerly REC 4540.)

HOS 4550 - Global Tourism

Units: 4

In depth discussion of tourism across the globe. Emphasis will be placed on environmental, economic, social and cultural impacts of tourism, with a specific focus on sustainable tourism. The host-guest-place relationship is an essential part of this course. (Formerly REC 4550.)

HOS 4560 - Food and Beverage Management

Units: 4

Explore principles of food and beverage operations and logistics, including standards, culinary and service trends, management challenges, legal and ethical issues and quality. Interaction with the industry is an essential part of this class. *Prerequisites: REC 1000, HOS 1100, REC 2050, REC 2400 or REC 3000, or permission of instructor.* (Formerly REC 4560.)

HOS 4570 - Dimensions in Tourism

Units: 4

The principles, practices, and philosophies of tourism are examined and discussed. To acquaint the student with the tourism system's components both supply and demand, and the different functional areas (e.g., marketing and planning) that manage them. *Prerequisites: REC 1000, HOS 1100, REC 2050, REC 2400 or REC 3000, or permission of instructor.*

HOS 4590 - Hospitality Law

Units: 4

Exploration of employment discrimination, tort, and contract concepts as applied to the legal aspects of hospitality and tourism management, using relevant federal and state cases and statutes. *Prerequisites: REC 1000, HOS 1100, REC 2050, REC 2400 or REC 3000, or permission of instructor.*

HOS 4901 - Hospitality Internship Placement

Units: 2

Internship placement, must meet with advisor two quarters before intended internship, interview with intern sites, get a signed contract. **MUST** successfully complete LiveSCAN, including background check and fingerprinting. Interviewing techniques, networking and professional expectations will be discussed with advisor. *Prerequisites: Completion of all core and elective classes, or permission of instructor. CR/NC grading only.*

HOS 4912 - Hospitality Internship and Senior Project

Units: 4-12

Field experience in hospitality organization in preparation of a professional role. Supervision by agency and university personnel. Student must complete a minimum of 12 hours of credit, a total of 400 hours, and a senior project. *Prerequisites: Completion of all core and elective classes, or permission of instructor. May be repeated for credit with consent of department chair, for a maximum of 24 units. CR/NC grading only. (Formerly REC 4912.)*

Human Development

HDEV 1301 - The Human Condition

Units: 4

Various attempts to find meaning in human existence from the perspectives of human development.

HDEV 2001 - Human Development in Contemporary Society

Units: 4

Introduction to the study of social and environmental problems influencing human development.

HDEV 2010 - Introduction to Early Childhood

Units: 4

Current research methods and findings about the physical, emotional, and intellectual development of children from conception through age 5, with an emphasis on historical trends and cultural contexts.

HDEV 3101 - Lifespan Physical and Cognitive Development

Units: 4

Psychological perspectives on human physical and cognitive development throughout the lifespan. *Prerequisites: Upper division standing.*

HDEV 3102 - Lifespan Social and Emotional Development

Units: 4

Psychological perspectives on human social and emotional development throughout the lifespan. *Prerequisites: Upper division standing.*

HDEV 3103 - Social and Cultural Dynamics of Human Development

Units: 4

The influence of socio-cultural contexts on various domains of lifespan development, including family systems, cultural ideologies, social conventions and hierarchies, gender, and workplace. *Prerequisites: Upper division standing.*

HDEV 3201 - Theories of Human Development

Units: 4

Critical review of major theoretical approaches to human development from an interdisciplinary perspective. *Prerequisites: Upper division standing.*

HDEV 3202 - Research Methods in Human Development

Units: 4

Review of major research designs and techniques for contemporary empirical inquiry into human development. Qualitative and quantitative approaches, including experiments, surveys, ethnography, interviews, and historical methods. *Prerequisites: Upper division standing.*

HDEV 3203 - Applying Theory and Methods of Human Development

Units: 4

Application of theories and methods learned in HDEV 3201 and 3202 to people, organizations, and/or settings in the community. Includes a service learning component. *Prerequisites: HDEV 3201, HDEV 3202.*

HDEV 3301 - Child Development

Units: 4

Development from conception to pre-adolescence viewed from various perspectives: biological, psychoanalytic, cognitive-structural, stimulus-response, humanistic. Prenatal care and counseling, attachment-separation, parenting and institutional care. *Prerequisites: Upper division standing.* Not open to students with credit for HDEV 4700.

HDEV 3302 - Foundational Aspects of Adolescent Development

Units: 4

Developmental issues arising during the teenage years-career choice, intimacy, biological changes, and attainment of cognitive, social, biological, and emotional maturity. *Prerequisites: Upper division standing.* Not open to students with credit for HDEV 4400.

HDEV 3303 - Adult Development and Aging

Units: 4

Normative life crises and transition in adulthood-affective, cognitive, cultural, economic, interpersonal, physiological, social, spiritual, and vocational aspects. *Prerequisites: Upper division standing.* Not open to students with credit for HDEV 4300.

HDEV 3304 - Girls and Women Across the Lifespan

Units: 4

Examination of development and change in behavior of girls and women from infancy through old age, with emphasis on theory, method, and empirical research. *Prerequisites: Upper division standing.*

HDEV 3800 - Human Development and Interaction

Units: 4

Interdisciplinary methodologies (integrating sociocultural and biological perspectives) are examined and applied to understanding the human lifespan in interpersonal contexts.

HDEV 3999 - Issues in Human Development

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in human development. May be repeated for credit when content varies, for a maximum of 8 units.

HDEV 4010 - Early Childhood Cognitive Development

Units: 4

Theories, methods, and research findings in early childhood cognitive development from the prenatal stage to age five. Biological and genetic foundations of cognition, perception, mental representation, problem solving, reasoning, memory, metacognition, and social cognition. *Prerequisites: Upper division standing.*

HDEV 4030 - Early Childhood Social Development

Units: 4

Theories, methods, and research findings in early childhood social-emotional development from the neonatal stage to age five. Topics include emotion and temperament, attachment, identity, achievement, gender roles, pro- and anti-social behavior, morality, peers, and the family. *Prerequisites: Upper division standing.*

HDEV 4110 - Child Cognitive Development

Units: 4

Theories, methods, and research findings in child cognitive development from the prenatal stage to age 12. Biological and genetic foundations of cognition, perception, mental representation, problem solving, reasoning, memory, metacognition, and social cognition. *Prerequisites: Upper division standing.* Not open to students with credit for HDEV 4510.

HDEV 4120 - Child Language Development

Units: 4

Interdisciplinary study of the development of a first language and the biological, linguistic, cognitive, and social factors involved. Development of prelinguistic skills, semantics, syntax, discourse skills, and phonology. Language acquisition theories and hypotheses. *Prerequisites: Upper division standing.* Not open to students with credit for HDEV 4520.

HDEV 4130 - The Social Development of Children

Units: 4

Theories, methods, and research findings in childhood social-emotional development from birth to age 12. Emotion and temperament, attachment, identity, achievement, gender roles, pro- and anti-social behavior, morality, peers, and the family.

Prerequisites: Upper division standing.

HDEV 4140 - Theories of Childhood

Units: 4

Critical review of major theories of childhood; examination of changes in theories and concepts about childhood over time.

Prerequisites: Upper division standing.

HDEV 4150 - Children in Families and Communities

Units: 4

Child development in a variety of familial, communal, and institutional settings. Issues of child abuse, divorce, foster care, and adoption. *Prerequisites: Upper division standing.* Not open to students with credit for HDEV 4710.

HDEV 4220 - Contemporary Research Topics in Adolescent Development

Units: 4

Contemporary theories, research, issues and trends in adolescent development. *Prerequisites: Upper division standing.*

HDEV 4230 - Prevention and Intervention in Adolescent Development

Units: 4

Research and theory-based approaches to developing and evaluating prevention and intervention programs for adolescents at risk.

Prerequisites: Upper division standing.

HDEV 4310 - Human Development in the Changing Workplace

Units: 4

A study of developmental issues that arise in contemporary work environments; creative professional identities under uncertain conditions of employment, reconciling adult commitments splintered by career demands, and developing interaction skills in work settings rich in human diversity; confronting work place inequalities.

HDEV 4361 - Current Issues in Aging

Units: 4

Research and theory-based approaches to current issues in aging. Topics may include social class, economics, biological changes, policies, and individual differences. *Prerequisites: Upper division standing.* Not open to students with credit for HDEV 4004.

HDEV 4362 - Aging and Diversity

Units: 4

Interdisciplinary exploration of aging and race, ethnicity, and gender. *Prerequisites: Upper division standing.* Not open to students with credit for HDEV 4005.

HDEV 4363 - Cognitive Aging

Units: 4

Current theories and research in cognitive changes at advanced age; practical and social implications. *Prerequisites: Upper division standing.*

HDEV 4430 - Intimate Relationships Throughout the Lifespan

Units: 4

Nature and structure of parent-child, friendship, and sexual love relations. Developmental changes during childhood, adolescence, adulthood, and old age. *Prerequisites: Upper division standing. Not open to students with credit for HDEV 4350.*

HDEV 4440 - Lesbian and Gay Lifespan Development

Units: 4

Theoretical models and research relevant to the development of lesbians and gay men; examination of stereotypes and myths. Gender identity, sexual orientation, sexuality, love relationships, friendship networks, family, and community relations. *Prerequisites: Upper division standing. Not open to students with credit for HDEV 4325.*

HDEV 4450 - Human Development and Conflict in Contemporary Society

Units: 4

Impact and consequences of different forms of conflict on lifespan human development, ranging from wars and military actions to prisons and domestic violence. Focus on contemporary social conflict using an interdisciplinary social science perspective. *Hybrid course.*

HDEV 4811 - Senior Research Seminar in Human Development I

Units: 4

Part I of the capstone experience in the major. Design of proposal for independent research to be implemented in HDEV 4812. *Prerequisites: Completion of all HDEV Junior Foundation courses; plus 16 additional upper division HDEV units.*

HDEV 4812 - Senior Research Seminar in Human Development II

Units: 4

Part II of the capstone experience in the major. Implementation of the research plan developed in HDEV 4811; preparation of formal research report based on the study. *Prerequisites: HDEV 4811.*

HDEV 4860 - Internship in Human Development

Units: 1-4

Supervised work experience that integrates academic learning and field experience, and promotes development of students' professional activities. *Prerequisites: Instructor approval. May be repeated three times for credit, for a maximum of 12 units. CR/NC grading only.*

HDEV 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

Humanities

HUM 3999 - Issues in Humanities

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in humanities. May be repeated for credit when content varies, for a maximum of 8 units.

Industrial Engineering

INDE 3020 - Work Design and Measurement

Units: 4

Principles of work simplification and motion analysis. Recording of work flow and methods. Work measurement and standards, time study, synthetic data, predetermined time systems, and work sampling. Allowances and performance rating, productivity measures. Work design improvement. Military standards. *Prerequisites: PHYS 1001*. Three hrs. lect., 3 hrs. lab.

INDE 3101 - Statics and Dynamics

Units: 4

An intermediate introduction to Newtonian mechanics. Analysis of forces on engineering structure in equilibrium, moments, couples, kinematics, energy and gravitation. Analysis of motions of particles and rigid bodies in engineering. *Prerequisites: PHYS 1001*.

INDE 3140 - Engineering Economy

Units: 4

Macroeconomic concepts such as inflation, interest rates, banking system, global trade, and exchange rates, fundamental microeconomic concepts of supply and demand, opportunity costs, and comparative advantage. Economic analysis of engineering decisions. Determining rates of return on investments. Effects of inflation, depreciation, and income taxes. Application of basic principles and tools of analysis using case studies. *Prerequisites: ECON 2301, MATH 1304*. Cross-listed ECON 3140.

INDE 3190 - Human Factors Engineering

Units: 4

Analysis of factors influencing the efficiency of human work. Data on the physical and mental capacities of persons, the physical environment, work organization, and the problem of aging. Human reactions and capabilities related to specific tasks and systems. Design of machines, operations, human computer interface and work environment to match human capacities and limitations, including the handicapped. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005); STAT 3601/INDE 3601 or STAT 1000*. Cross-listed PSYC 3190.

INDE 3601 - Statistics and Probability for Science and Engineering I

Units: 4

(See STAT 3601 for course description.)

INDE 3602 - Statistics and Probability for Science and Engineering II

Units: 4

(See STAT 3602 for course description.)

INDE 3841 - Operations Research

Units: 4

Theory and application of deterministic optimization techniques. Topics selected from project management, networks, linear programming, non-linear programming, game theory and dynamic programming. *Prerequisites: MATH 2304.*

INDE 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus activities. *Prerequisites: At least a 2.5 GPA, junior or senior standing, departmental approval of activity. A maximum of 4 units will be accepted toward the Engineering major. CR/NC grading only.*

INDE 3999 - Issues in Industrial Engineering

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in engineering.

INDE 4090 - Economic Decision Systems

Units: 4

Economic evaluation of information for complex decisions. Analysis of risks and uncertainties. Bayes theory and models. Decision theory, sequential decisions, and value of information applied to financial evaluation and control. Major project justification procedures. *Prerequisites: INDE 3140, STAT 3601/INDE 3601.* Not open to students with credit for ENGR 6090.

INDE 4100 - Production Planning and Control

Units: 4

Inventory planning and control systems. Implementation of manufacturing resource planning including demand forecasting, production planning, master scheduling, bill-of-material, and inventory master file. Capacity requirements planning and shop floor control. Project management. *Prerequisites: ENGR 2070, INDE 3841; STAT 3601/INDE 3601.* Three hrs. lect., 3 hrs. lab.

INDE 4180 - Product-Process Design

Units: 4

Investigation of the product and process design cycle as a source of competitive advantage. Topics include functional maps, aggregate planning, cross-functional integration, design for manufacturability, and the design-build-test cycle. Case studies and site visits used extensively to reinforce concepts presented in lectures and reading assignments. *Prerequisites: ENGR 2070, INDE 3140.*

INDE 4200 - Systems Simulation

Units: 4

Design and analysis of manufacturing and service systems by simulation. Function of random variables. Random number and function generators, programming and characteristics of simulation languages. *Prerequisites: CS 1160, INDE 3841, STAT 3601/INDE 3601.* Three hrs. lect., 3 hrs. lab.

INDE 4280 - Design and Management of Human Work Systems

Units: 4

Qualitative principles and techniques used to maximize labor productivity, employee satisfaction, and organizational performance in work settings. Topics include worker motivation and incentive systems, leadership, worker autonomy, work groups and participatory organizational structures including quality control circles, total productive maintenance teams, and socio-technical systems. *Prerequisites: INDE 3020, INDE 3190.*

INDE 4300 - Quality Engineering

Units: 4

Quality control, reliability, maintainability, and integrated logistic support. Statistical theory of process control and sampling inspection. Risks associated with decisions based on operating characteristics of control charts and sampling plans. Reliability and life testing methods. Economics of statistical QC. *Prerequisites: ENGR 2070, STAT 3601/INDE 3601.*

INDE 4350 - Reliability Engineering

Units: 4

Reliability concepts and mathematical models, mechanical device reliability, electrical device reliability, systems reliability and maintainability, reliability data, assurance program elements. *Prerequisites: INDE 3841.*

INDE 4400 - Systems Modeling

Units: 4

Integration, problem identification, and the application of problem resolution techniques in manufacturing and service domains. System approach to problem identification, description, modeling, and resolutions derived by traditional optimization techniques as well as artificial intelligence methods. Supply chain modeling methods, logistics support analysis, procurement, and outsourcing strategies. *Co-requisites: INDE 4100.*

INDE 4430 - Facilities Planning and Design

Units: 4

Design concepts and input requirements in planning and design of new or renovation of existing manufacturing systems. Product, process, and flow and activity analysis techniques. Flow lines and buffering techniques. Computer-aided layout design and evaluation. Design of handling systems. Math models of location problems. *Prerequisites: INDE 3020 and INDE 3841.* Three hrs. lect., 3 hrs. lab.

INDE 4440 - Computer Integrated Manufacturing Systems

Units: 4

Introduction to automation, computer aided manufacturing, group technology, computer aided process planning, cellular manufacturing, just-in-time manufacturing, Push and Pull Manufacturing Systems, and production control. *Prerequisites: INDE 4100 or concurrent enrollment.* Three hrs. lect., 2 hrs. lab.

INDE 4610 - Senior Design I

Units: 3

Development of technical writing and presentation skills through class discussions, proposal writing and presentations. Development of team skills through identification and development of team project proposal and through team building exercises. Utilization of engineering design process and project management techniques in proposal development. Introduction of

engineering ethics through case studies. *Prerequisites: for Engineering Department: Senior standing and departmental approval. Prerequisite or Co-requisite: for Industrial Engineering Option: any three of INDE 4100, INDE 4200, INDE 4300, INDE 4430. Prerequisites or co-requisites for Computer Engineering Option: CS 4435/CMPE 4435 and CS 4560.*

INDE 4620 - Senior Design II

Units: 3

Utilization of industrial engineering skills and engineering design concepts including development of alternative solutions and economic analysis of alternatives to complete an industrial project. *Prerequisites: INDE 4610.*

INDE 4900 - Independent Study

Units: 1-4

Information Literacy

LIBY 1210 - Introduction to Information Literacy

Units: 2

Basic information literacy concepts. Research strategies and appropriate techniques for effectively identifying, acquiring, evaluating, using, and communicating information in various formats. Sections tailored to articulate with courses in first year thematic G. E. sequences in Areas B, C, and D. *Prerequisites: Enrollment in the First Year Cluster or permission of instructor. Not open to students with credit for LIBY 1551. A-F grading only.*

LIBY 1551 - Information Skills in the Electronic Age

Units: 2

Instruction and practice in accessing information through print, electronic, and other non-print formats. Includes examination of the Library's collections as well as information available remotely through electronic means. Not open to students with credit for LIBY 1210. *CR/NC grading only.*

Information Technology Management

ITM 1270 - Fundamentals of Information Systems and Applications

Units: 4

Fundamentals of Computer Information Systems and applications. Focus on the basics of hardware/ software, and applications. Topics include computer components, management information systems, e-commerce, security, ethics, and the role of computers in society. Hands-on applications include using spreadsheet, database, wordprocessing, and web applications. Satisfies PC software proficiency requirement. Not open to students with credit for CS 1020.

ITM 3060 - Information Technology Management

Units: 4

Effective and efficient uses of computers in business as a problem solving tool. Topics include computer systems components, systems analysis, database management systems, telecommunications, productivity tools, and mini-projects related to computer-based solutions to business problems. *Prerequisites: PC software proficiency.*

ITM 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least 2.0 GPA; departmental approval of activity.* May be repeated for credit, for a maximum of 4 units. Units not applicable to options or minor. *CR/NC grading only.*

ITM 3999 - Issues in Information Technology Management

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in information technology management. May be repeated for credit when content varies, for a maximum of 8 units.

ITM 4271 - Database Management and Applications

Units: 4

Data modeling, database design and implementation, and database applications. Topics include: database design, incorporating business rules into entity-relationship (ER) models, transformation of an ER model into a relational database design, normalization of database tables, SQL data definition language and data manipulation language, views, and triggers.

Prerequisites: ITM 3060.

ITM 4272 - Information Technology and Telecommunication Systems

Units: 4

Theory and practice of computer networking and data communication management in a business environment. Topics include: network-related technology, standards, protocols, security and design. Primary emphasis on how network and data communication technology integrate with existing corporation architecture and how to identify network solutions to support business objectives. *Prerequisites: ITM 3060.*

ITM 4273 - Business Intelligence Systems

Units: 4

Computerized support for decision making and business intelligence systems. Specific topics include, but are not limited to: major tools and techniques of managerial decision support, the essentials of business intelligence, data warehousing definitions and architectures, data integration, data visualization, data mining concepts and applications. *Prerequisites: ITM 3060.*

ITM 4277 - Information Systems Development and Management

Units: 4

A methodical approach to developing information systems including systems planning, analysis, design, testing, implementation and maintenance. Primary emphasis on learning and practicing techniques and processes used by systems analysts at each phase within the systems development cycle and working as a team to create system solutions for clients. *Prerequisites: ITM 3060.*

ITM 4278 - E-Business Systems Development

Units: 4

An overview of the basic knowledge of e-commerce technologies. Primary emphasis is on developing skills in implementing business-oriented systems for electronic commerce using Internet technologies. Topics include: Internet technology components, world wide web, databases, programming, security standards, web authorizing tools, integration with enterprise systems.

Prerequisites: ITM 3060.

ITM 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

Information Technology Management: Graduate

ITM 6015 - Information Systems Development and Management

Units: 4

Development of business information technology strategies and solutions for enterprise and global information management systems. Topics include the structure, analysis, design, and implementation of information technology systems. *Prerequisites:* *See Errata chapter in this catalog concerning prerequisite update. A-F grading only.

ITM 6130 - Enterprise Management Systems

Units: 4

Design, selection and implementation of enterprise resource management (ERM) and enterprise resource planning (ERP) systems. Emphasis on integration and automation of business functions. Development of practical skills and utilization of enterprise resource planning software. *Prerequisites:* *See Errata chapter in this catalog concerning prerequisite update.

ITM 6271 - Database Management and Applications

Units: 4

Data modeling, database design and implementation, database administration, and database applications. Topics include: database design, incorporating business rules into entity-relationship (ER) models, transformation of an ER model into a relational database design, normalization of database tables, SQL data definition language and data manipulation language, views, triggers, data dictionary, and the Internet database environment. *Prerequisites:* *See Errata chapter in this catalog concerning prerequisite update.

ITM 6273 - Knowledge Management

Units: 4

Computerized support for knowledge management. Topics include: the concepts and tools of knowledge management, data visualization, data management, text and Web mining concepts and applications, and big data technologies and tools such as Hadoop. *Prerequisites:* All fundamental coursework: ITM 6015, MGMT 6015. A-F grading only.

ITM 6280 - Data Warehousing

Units: 4

Data warehousing concepts, design, implementation, and software tools. Topics include data warehouse architecture, dimensional model design, physical database design, data integration and visualization, and data warehouse administration. *Prerequisites:* ITM 6271 or instructor consent. A-F grading only.

ITM 6285 - Data Mining

Units: 4

Big data and data mining software applications; introduction to and study of the concepts and technologies of data mining. Topics include data preparation and classification, clustering, prediction, scalability, and data visualization, evaluation and ethical issues in data mining. *Prerequisites:* ITM 6271 or instructor consent. A-F grading only.

ITM 6898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities within the quarter enrolled. *CR/NC grading only.*

ITM 6899 - Project

Units: 1

Development and writing of business analytics project. Supervision by an ITM faculty member required. *Prerequisites: All fundamental and required coursework: ITM 6015, ITM 6271, ITM 6273, ITM 6280, ITM 6285, MGMT 6015, MGMT 6160, and MGMT 6165. A-F grading only.*

ITM 6900 - Independent Study

Units: 1-4

ITM 6909 - Departmental Thesis

Units: 1-4

Development and writing of a research paper for submission to the department which specifies its format. Supervision by a faculty committee, at least one of whom must be a Cal State East Bay faculty member.

ITM 6999 - Issues in Information Technology Management

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in information technology management.

International Studies

INTS 3100 - Global Systems

Units: 4

The wide range of global systems which have evolved to provide a framework for international transactions and problem-solving. Focus on global systems in the areas of politics, economics, mass media, science/technology, and basic human needs. The origins, objectives, and institutional capabilities of existing global systems in each area.

INTS 3999 - Issues in International Studies

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in international studies. May be repeated for credit when content varies, for a maximum of 8 units.

INTS 4100 - International Field Work

Units: 2-4

Supervised field placement with a company, non-profit organization or government agency in which a substantial portion of the work experience is internationally related. Foreign placements are encouraged. May be repeated once for credit for a maximum of 8 units. *CR/NC grading only.*

INTS 4500 - Senior Seminar

Units: 4

Advanced analysis and evaluation of global systems. Study of theoretical models. *Prerequisites: INTS 3100.*

INTS 4900 - Independent Study

Units: 1-4

Kinesiology

KIN 1000 - Beginning Activities: Badminton

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. activity.

KIN 1001 - Beginning Activities: Basketball

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. activity.

KIN 1007 - Beginning Activities: Swimming

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. activity.

KIN 1009 - Beginning Activities: Volleyball

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. activity.

KIN 1011 - Beginning Circuit Training

Units: 1

Overall basic aerobic and resistance training for toning, weight loss, and overall body conditioning. Proper warm-up and cool down techniques. Heart rate monitoring. Circuit changes throughout the quarter. May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 1012 - Beginning Activities: Fitness Training

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. activity.

KIN 1013 - Beginning Activities: Judo

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. activity.

KIN 1015 - Hapkido Self Defense

Units: 1

Hapkido is a practical martial art emphasizing leverage and blending rather than the use of physical strength as an effective means of self defense. May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 1016 - Beginning Activities: Taekwondo Karate

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. activity.

KIN 1017 - Beginning Activities: Soccer

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. activity.

KIN 1018 - Beginning Activities: Self Defense-Women

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. activity.

KIN 1021 - Beginning Activities: Golf

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. activity.

KIN 1024 - Beginning Activities: Tennis

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. activity.

KIN 1028 - Beginning Activities: Jogging

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. activity.

KIN 1032 - Beginning Activities: Aerobic Fitness: Lap Swimming

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. activity.

KIN 1034 - Beginning Activities: Yoga

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. activity.

KIN 1035 - Beginning Activities: Tai Chi

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. activity.

KIN 1036 - Dance Fitness

Units: 1

Course Content: Development of fitness through dance. Basic dance steps for various music types and warm up and stretching instruction. May be repeated once for credit, for a maximum of 2 units. Two hrs. activity.

KIN 1038 - Beginning Activities: Aerobic Fitness: Kick Box

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. activity.

KIN 1041 - Beginning Activities: Aerobic Condition

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. activity.

KIN 1043 - Beginning Pilates

Units: 1

Pilates is a non-impact, integrative exercise method. Fundamentals, basics and beginning mat work. It is designed for strengthening the core muscles to improve posture, limb mobility and overall flexibility and balance. May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 1044 - Beginning Boot Camp Fitness

Units: 1

An intense conditioning class that incorporates a full body workout using cardio, strength, endurance, and stretching exercises. May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 1045 - Beginning Activities: Firm and Tone

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. activity.

KIN 1047 - Beginning Activities: Indoor Soccer

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. activity.

KIN 1048 - Soccer-Tennis

Units: 1

Activity combining the skills of soccer with the rules of tennis. Focus on skill development and learning rules, strategies, safety, and etiquette. Appropriate for all skill levels from beginning to advanced. *ABC/NC grading only.* Two hrs activity. *May be repeated once for credit for a maximum of 2 units.*

KIN 1049 - Beginning Activities: Aerobic Walking

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. activity.

KIN 1052 - Beginning Water Polo

Units: 1

Course Content: Basic skills required for water polo. Conditioning, ball skills, and strategy. May be repeated once for credit, for a maximum of 2 units. Two hrs. activity.

KIN 1054 - Beginning Flag Football

Units: 1

Emphasis on basic skill development, rules, strategies, safety, and sportsmanship involved in playing both competitively and recreationally. May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 1055 - Beginning Table Tennis

Units: 1

Emphasis on basic skill development, rules, strategies, safety, and etiquette necessary to play both competitively and recreationally. May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 1056 - Ultimate

Non-stop movement, athletic endurance, aerial passing skills with a disc. Introduction to basic skills and strategy. May be repeated once for credit, for a maximum of 2 units. Two hrs. activity.

KIN 1111 - Physical Activity and Social Justice

Units: 4

Promote lifelong physical activity for all populations. Proper body mechanics, nutrition, and training techniques, and strategies to create meaningful and satisfying physical activity opportunities for all people. Exploration of ways to promote more humane, socially just, and democratic forms of physical activity so that all are given opportunities to gain the benefits of physical activity. *Satisfies GE Social Science Area: D1-3.*

KIN 1610 - Introduction to Kinesiology

Units: 4

Study of human movement from a humanities, social science, and life science perspective. Topics: history; biomechanics/exercise physiology; skill learning; psychological/ sociological factors. Career opportunities: health fields (i.e., physical and occupational therapy); exercise professions (i.e., rehabilitation and wellness); educational (i.e., teaching and coaching).

KIN 1625 - Nutrition and Performance

Units: 4

The interrelationship of nutrition and exercise capability. The effect on athletic performance of diet and food additives. Not open to students with credit for KIN 1626.

KIN 1626 - Nutrition and Performance for Bodies at Play

Units: 4

The study of the basic principles of food and energy and their effect upon performance and fitness. Topics include a study of nutrients, basic diet, weight management, exercise demands, training principles, fitness development and effective nutritional practices. May be repeated once for credit, for a maximum of 8 units. Not open to students with credit for KIN 1625.

KIN 2000 - Intermediate Activities: Badminton

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 2001 - Intermediate Activities: Basketball

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 2007 - Intermediate Activities: Swimming

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 2009 - Intermediate Activities: Volleyball

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 2010 - Intermediate Activities: Weight Training

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 2011 - Intermediate Circuit Training

Units: 1

Aerobic conditioning and resistance training for increased toning and overall body conditioning. Proper warm-up and cool down. Heart rate monitoring. Circuit changes throughout the quarter. May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 2012 - Intermediate Activities: Fitness Training

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 2016 - Intermediate Activities: Taekwondo

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 2017 - Intermediate Activities: Soccer

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 2024 - Intermediate Activities: Tennis

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 2034 - Intermediate Yoga

Units: 1

Introduction to more variations of well-known Yoga positions, emphasizing a balanced approach to Yoga that embraces relaxation, flexibility, strength and cardiovascular training. Students are encouraged to develop a unique individual practice appropriate for their fitness level and goals. *Prerequisites: Previous course in Yoga or consent of instructor.* May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 2035 - Intermediate Activities: Tai Chi

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 2038 - Intermediate Activities: Kick Boxing

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 2040 - Intermediate Activities: Varied Activities

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 2041 - Intermediate Activities: Aerobic Conditioning

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 2047 - Intermediate Activities: Indoor Soccer

Units: 1

May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 2054 - Intermediate Flag Football

Units: 1

Emphasis on intermediate skills, strategies, safety, and sportsmanship involved in playing both competitively and recreationally. *Prerequisites: Beginning or intermediate level flag football course or consent of instructor.* May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 2055 - Intermediate Table Tennis

Units: 1

Emphasis on more advanced and challenging skill development, rules, strategies, safety, and etiquette necessary to play both competitively and recreationally. May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 2300 - Nutrition for Healthy Bodies

Units: 4

Basic concepts of personal nutrition and fitness in relationship to a healthy lifestyle; physical and psycho-social factors; various mind-body options. Develop individualized programs for lifelong wellness and the maintaining of healthy minds and bodies. Lecture, team, and class discussions, media aids, and active participation.

KIN 2600 - Prevention and Care of Athletic Injuries

Units: 4

Beginning course in the recognition, management, reconditioning, and prevention of injuries occurring in physical activity. Recommended preparation: BIOL 2010 or equivalent.

KIN 2650 - CPR and First Aid

Units: 2

Adult and pediatric CPR and First Aid. Meets qualifications for Red Cross first aid and CPR certification. Not open to students with credit for KIN 4650 or KIN 4651. May be repeated once for credit, for a maximum of 4 units. *A-F grading only.*

KIN 2700 - Women and Sport

Units: 4

Examination of the cultural dynamics of females and sport from a sociological and historical perspective. Not open to students with credit for KIN 1888.

KIN 3072 - Individual and Dual Sports

Units: 3

Theory, analysis, and practice of the skills, techniques, and knowledge necessary for the teaching of individual and dual sports. Participation required. *Prerequisites: One college-level course in individual sports and one in dual sports, or consent of the instructor.* Two hrs. lect., 2 hrs. act.

KIN 3075 - Aquatics and Outdoor Education

Units: 3

Theory, analysis, and practice of the skills, techniques, and knowledge necessary for the teaching of aquatics and outdoor education. Participation required. *Prerequisites: one college-level course in aquatics and one in an outdoor education activity, or consent of the instructor.* Two hrs. lect., 2 hrs. act.

KIN 3079 - Combatives and Fitness Activities

Units: 3

Theory, analysis, and practice of the skills, techniques, and knowledge necessary for the teaching of combatives and fitness activities. Participation required. *Prerequisites: One college-level course in combative skills and one in fitness activities, or consent of the instructor.* Two hrs. lect., 2 hrs. act.

KIN 3080 - Team Sports and Field Sports

Units: 3

Theory, analysis, and practice of the skills, techniques and knowledge necessary for the teaching of team sports and field sports. Participation required. *Prerequisites: One college-level course in team sports and one in field sports, or consent of the instructor.* Two hrs. lect., 2 hrs. act.

KIN 3200 - Sport in Film: Cultural Perspectives

Units: 4

Societal values, politics, mores, and individual and group behavior related to sport participation as illustrated in film.

KIN 3205 - Mental Skills for Performance

Units: 4

Mental skills for performance; reviews theory and then provides practical examples of mental skills that can be used in a variety of settings. Topics include: mental imagery, arousal control and self-efficacy, and concentration on video training. *Prerequisites: KIN 3350. A-F grading only.*

KIN 3210 - Science of Expertise

Units: 4

Examination of research based evidence on the nature of expertise. The evidence will challenge commonly held beliefs that talent is innate and will, instead, review the literature that supports that motivation, dedicated practice and environment are major contributors. *Prerequisites: KIN 3330. A-F grading only.*

KIN 3251 - Physical Education for the Classroom Teacher: Physical Considerations

Units: 4

Examination of activity participation of children; particular emphasis on physical variables. Relationship of exercise physiology, biomechanics, and growth and development to physical activity. Integration of physical activity with classroom activities, in the physical and health sciences.

KIN 3252 - Physical Education for the Classroom Teacher: Psycho-Social Considerations

Units: 4

Examination of activity participation of children with emphasis on psycho-social variables. Topics from the sport and exercise psychology and sport humanities literature as it relates to physical teaching. Integration of physical activity with other classroom activities emphasized.

KIN 3255 - Fitness and Wellness for a Lifetime

Units: 4

Physical and psycho-social factors that contribute to lifelong wellness. Exercise, nutrition, stress and related issues from both conceptual and practical (movement and relaxation techniques) perspectives.

KIN 3300 - Critical Inquiry in Kinesiology

Units: 5

Theory and application of research methods and elementary data analysis related to professional practice in Kinesiology fields. STAT 1000 recommended. Four hrs. lecture, three hrs. lab.

KIN 3305 - Structural Kinesiology

Units: 4

Anatomical structures as functional determinants of movement. Skeletal, muscular, and nervous systems and their roles in determining movement efficiency. Kinesiological application of anatomical information. Recommended preparation: BIOL 1001 and CHEM 1100 or equivalents. *Prerequisites: BIOL 2010 or BIOL 2011.* Not open to students with credit for KIN 3331. *A-F grading only.*

KIN 3310 - Biomechanics

Units: 5

Biomechanics of human movement and the mechanical and muscular analysis of movement patterns. *Prerequisites: BIOL 2010 (or BIOL 2011); KIN 3300, KIN 3305.* Four hrs. lect., 3 hrs. lab.

KIN 3320 - Exercise Physiology

Units: 5

The physiological parameters and mechanisms that determine adaptations of the physiological systems of human beings in response to exercise. *Prerequisites: BIOL 2010 (or BIOL 2011); KIN 3300, KIN 3305.* Four hrs. lect., 3 hrs. lab.

KIN 3330 - Motor Learning and Control

Units: 5

The nature of sensorimotor skills. Analysis of the motor systems and mechanisms of basic sensorimotor integration. An overview of skill acquisition related primarily to sport and exercise. *Prerequisites: BIOL 2010 (or BIOL 2011); KIN 3300, KIN 3305.* Four hrs. lect., 3 hrs. lab.

KIN 3340 - Motor Development

Units: 4

Theoretical perspectives relevant in motor development research. Physical growth and maturation process from infancy to old age, including development and aging effects of specific body systems. Relevant social, cultural, psychosocial, and cognitive influences on human movement across the life span. *Prerequisites: KIN 3300 and KIN 3305. A-F grading only.*

KIN 3350 - Sport and Exercise Psychology

Units: 5

Theoretical and practical application of psychological factors in sport, exercise, rehabilitation and other physical activity settings. Topics include: motivation, anxiety, observational, learning, imagery, exercise adherence, injury and youth sport participation. *Prerequisites: KIN 3300 with at least a grade of C. A-F grading only.* Four hrs. lect., 3 hrs. lab.

KIN 3500 - Advanced Activities: Advanced Badminton

Units: 1

Instruction at advanced level for persons with intermediate level skill. May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 3501 - Advanced Activities: Advanced Basketball

Units: 1

Instruction at advanced level for persons with intermediate level skill. May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 3510 - Advanced Activities: Advanced Weight Training

Units: 1

Instruction at advanced level for persons with intermediate level skill. May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 3516 - Advanced Activities: Advanced Taekwondo

Units: 1

Instruction at advanced level for persons with intermediate level skill. May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 3517 - Advanced Activities: Advanced Soccer

Units: 1

Instruction at advanced level for persons with intermediate level skill. May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 3521 - Advanced Activities: Advanced Golf

Units: 1

Instruction at advanced level for persons with intermediate level skill. May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 3524 - Advanced Activities: Advanced Tennis

Units: 1

Instruction at advanced level for persons with intermediate level skill. May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 3534 - Advanced Activities: Advanced Yoga

Units: 1

Instruction at advanced level for persons with intermediate level skill. May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 3534 - Advanced Yoga

Units: 1

Exploration of a more vigorous (flowing) Yoga practice with much more emphasis on cardio-vascular system and muscle strengthening routines. Deepening of the knowledge of the relationship between Eastern Yoga Philosophy and Western Kinesiology. *Prerequisites:* At least two quarters of Yoga. Must possess experience in sitting, kneeling, standing, balancing, and prone and supine Yoga positions. May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 3542 - Aerobic Instructor Training

Units: 2

Skills and knowledge necessary to teach music-based aerobics classes. Fitness assessment, choreography, routines, and music selection. Students gain experience teaching an aerobics class. *Prerequisites:* Advanced level aerobic skills. Four hrs. act.

KIN 3545 - Competition Conditioning

Units: 2

Principles of development of personal fitness program. Topics include goal setting, self-assessment of fitness, nutrition principles, and access to on-line information. *May be repeated once for a maximum of four units.* Four hrs. act.

KIN 3547 - Advanced Activities: Advanced Indoor Soccer

Units: 1

Instruction at advanced level for persons with intermediate level skill. May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

KIN 3561 - Water Safety Instructor

Units: 2

Development of skills and knowledge leading to American Red Cross Water Safety Instructor certification. *Prerequisites:* Advanced swimming proficiency, American Red Cross Community First Aid and Safety certification or equivalent. Four hrs. act.

KIN 3600 - Evaluation and Care of Athletic Injuries

Units: 5

Application of kinesiology in the recognition, management, reconditioning, and prevention of athletic injuries. *Prerequisites:* KIN 3305 or permission of instructor. Four hrs. lect., 3 hrs. lab. (W)

KIN 3601 - Athletic Training: Modalities and Rehabilitation

Units: 4

Theory and application of therapeutic modalities; design of sports related injury rehabilitation programs. *Prerequisites:* KIN 2600 and 3600.

KIN 3700 - History of Sport and Physical Education

Units: 4

Examination of the history of sport and physical education in the United States from the early 19th century to the present with emphasis on the interplay between sport, social institutions and identity. *Prerequisites:* Junior standing. Satisfies GE Area: C4. *This course not for Kinesiology majors (See KIN 3701 for majors).*

KIN 3701 - History of Physical Activity

Units: 4

History of physical activity in the United States from 19th century to the present. Emphasis on the role of science and technology on ideas about the body and human movement. *Prerequisites:* Declared Kinesiology Major; KIN 3300. A-F grading only. *Hybrid course.*

KIN 3735 - Sport, Racism, and Ethnicity

Units: 4

Examines sport as a cultural site that reproduces and challenges racial and ethnic inequalities and ideologies. *Prerequisites:* Upper Division Standing. Not open to students with credit for ES 3140.

KIN 3740 - Philosophical Foundations of Kinesiology

Units: 4

Examination of the various ontological, epistemological, and axiological issues in sport with particular attention given to how conceptualizations of embodiment and ethical issues impact sport, physical education, and movement. *Prerequisites: KIN 3330.*

KIN 3750 - Sport in Contemporary Society

Units: 4

Examination of sport as a significant social and cultural institution that impacts and is impacted by the larger society. It analyzes past and contemporary issues and controversies through various sociological frameworks. Strongly Recommended: SOC 1000 or SOC 1002. *Prerequisites: KIN 3330.*

KIN 3999 - Issues in Kinesiology and Physical Education

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in kinesiology and physical education. May be repeated for credit when content varies, for a maximum of 8 units.

KIN 4004 - Elementary School Physical Education

Units: 4

Planning, development, implementation and evaluation of physical education programs in culturally diverse settings in grades K-5. Emphasis on games, sports, fundamental rhythms, and dance movements as delineated for instruction by the California State Physical Education Framework. *Prerequisites: Kinesiology major or with Instructor Permission.*

KIN 4005 - Exercise Nutrition and Metabolism

Units: 4

Kinesiological discussion of nutrients and ergogenic aids and their interaction within metabolic pathways. Emphasis upon the role of nutrients in bioenergetics and how manipulation of nutrient intake alters energy production during exercise. *Prerequisites: CHEM 1100 or equivalent, KIN 3320.*

KIN 4006 - Secondary School Physical Education

Units: 4

Planning, development, implementation and evaluation of physical education programs in culturally diverse setting in grades 6-12 as delineated by the California State Physical Education Framework. Emphasis on games, sports, dance, fitness activities and outdoor education as delineated for instruction by the California State Physical Education Framework. *Prerequisites: Kinesiology major or with Instructor Permission. (Sp)*

KIN 4008 - Adapted Physical Activity

Units: 4

Neurophysiological and functional aspects of psychomotor disabilities. Planning, teaching and evaluating modified physical education activities to meet the needs of exceptional students found in general physical education classes. Participation in laboratory setting required. *Prerequisites: Kinesiology major or with Instructor Permission.* (F)

KIN 4010 - Contemporary Perspectives in Exercise Nutrition

Units: 4

Study and application of current issues in exercise nutrition. Emphases on health and fitness program design and lifestyle management. *Prerequisites: KIN 1625, KIN 2600, KIN 4005, KIN 4610. Miscellaneous course fee. See quarterly Class Schedule for current fee.*

KIN 4030 - Professional Field Experience I

Units: 1-4

Instruction in and practice of professional technique and methodology through supervised field work. *Prerequisites: Completion of skill requirements for the major or minor. CR/NC grading only.*

KIN 4031 - Professional Field Experience II

Units: 1-4

Off campus field experience related to degree options. May be repeated for credit toward degree/certificate, as follows: Single-Option Majors: a maximum of 4 units credit; Double-Option Majors: each option, a maximum of 4 units credit (8 units total credit). *CR/NC grading only.*

KIN 4051 - Intercollegiate Sports: Basketball (men)

Units: 1

May be repeated for credit according to season, for a maximum of 12 units for each Intercollegiate Sports course. Three hrs. perf.

KIN 4053 - Intercollegiate Sports: Baseball (men)

Units: 1

May be repeated for credit according to season, for a maximum of 12 units for each Intercollegiate Sports course. Three hrs. perf.

KIN 4054 - Intercollegiate Sports: Cross-country

Units: 1

May be repeated for credit according to season, for a maximum of 12 units for each Intercollegiate Sports course. Three hrs. perf.

KIN 4055 - Intercollegiate Sports: Intercollegiate Outdoor Track

Units: 1

May be repeated for credit according to season, for a maximum of 12 units for each Intercollegiate Sports course. Three hrs. perf.

KIN 4058 - Intercollegiate Sports: Intercollegiate Golf

Units: 1

May be repeated for credit according to season, for a maximum of 12 units for each Intercollegiate Sports course. Three hrs. perf.

KIN 4062 - Intercollegiate Sports: Basketball (women)

Units: 1

May be repeated for credit according to season, for a maximum of 12 units for each Intercollegiate Sports course. Three hrs. perf.

KIN 4068 - Intercollegiate Sports: Volleyball (women)

Units: 1

May be repeated for credit according to season, for a maximum of 12 units for each Intercollegiate Sports course. Three hrs. perf.

KIN 4069 - Intercollegiate Sports: Soccer (men)

Units: 1

May be repeated for credit according to season, for a maximum of 12 units for each Intercollegiate Sports course. Three hrs. perf.

KIN 4074 - Intercollegiate Sports: Softball (women)

Units: 1

May be repeated for credit according to season, for a maximum of 12 units for each Intercollegiate Sports course. Three hrs. perf.

KIN 4077 - Intercollegiate Sports: Swimming (women)

Units: 1

May be repeated for credit according to season, for a maximum of 12 units for each Intercollegiate Sports course. Three hrs. perf.

KIN 4078 - Intercollegiate Sports: Water Polo (women)

Units: 1

May be repeated for credit according to season, for a maximum of 12 units for each Intercollegiate Sports course. Three hrs. perf.

KIN 4083 - Intercollegiate Sports: Soccer (women)

Units: 1

May be repeated for credit according to season, for a maximum of 12 units for each Intercollegiate Sports course. Three hrs. perf.

KIN 4090 - Computer Application in Kinesiology

Units: 4

Using computers as an adaptive, interactive, and exploratory tool for understanding different applications in physical education settings. Word processing, database, spread sheet, multimedia, and Internet applications. *Prerequisites: Junior standing. A-F grading only.*

KIN 4330 - Clinical Exercise Physiology

Units: 4

Study and practice of techniques for administering/evaluating the results of exercise stress tests; development of comprehensive exercise prescriptions for healthy special populations (e.g., children, elderly, females) and individuals with controlled diseases; role of exercise in the etiology, pathology, prognosis and management of chronic disease. *Prerequisites: KIN 3320 and KIN 4610 or equivalent.*

KIN 4600 - Athletic Training Practicum

Units: 2

Supervised clinical experience in techniques of athletic training. *Prerequisites: KIN 2600 or concurrent. Open only to students in departmental option in athletic training/clinical exercise.* May be repeated two times for credit, for a maximum of 6 units.

KIN 4610 - Exercise Prescription

Units: 4

Application of kinesiological principles to methods of physical conditioning. Systems of progressive resistance exercise, physical fitness and training. Exercise programs for special conditions and effects. *Prerequisites: KIN 3320.* Three hrs. lect., 3 hrs. lab.

KIN 4614 - Exercise and Well-Being

Units: 4

The nature of physical activity in relationship to fitness, health, and well-being. Understanding stress and the prevention of diseases related to stress and inactive lifestyles. *Prerequisites: Upper division standing.* Not for KIN major or minor credit.

KIN 4615 - Exercise and Stress

Units: 4

The nature of stress and its relationship to exercise. The physiology of the stress response, its role in disease, and immediate and long term interactions of exercise and stress. *Prerequisites: KIN 3320.*

KIN 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

Kinesiology: Graduate

KIN 5900 - Independent Study

Units: 1-4

Consult an advisor to determine if this course can be applied to the M.S. degree.

KIN 6000 - Foundations of Graduate Study and Research

Units: 5

Analysis of physical education and kinesiological variables. Scientific thought and inquiry. Application of research methods to specific problems. Statistics/technology module included. *CR/NC grading only.*

KIN 6411 - Psychology of Physical Activity

Units: 4

Psychological issues in physical activity participation. Emphasis on motivation, group processes, psychological health and development, and psychological skills for teaching and performance. May be repeated once for credit with consent of instructor, for a maximum of 8 units. *A-F grading only.*

KIN 6412 - Psychomotor Skill Acquisition

Units: 4

Principles of motor skill learning and skilled performance. Emphases on theory and research in areas of motor learning and motor control as applied to sport, rehabilitation, and physical skill development and performance. May be repeated once for credit with consent of instructor, for a maximum of 8 units. *A-F grading only.*

KIN 6413 - Mental Skills for Physical Performance

Units: 4

Theory and practice in the development of psychological skills for learning and performance. Various models and methods are explored with emphasis on cognitive-behavioral methods of educational sport psychology. May be repeated once for credit with consent of instructor, for a maximum of 8 units. *A-F grading only.*

KIN 6416 - Exercise Psychology

Units: 4

Application of psychological principles to the promotion and maintenance of exercise. Psychological and emotional consequences of exercise participation. Emphasis on physical activity epidemiology, theories and models of exercise behavior, physical activity interventions, anxiety and exercise, emotional well-being, self-esteem, health-related quality of life, social influences, and body image. May be repeated once for credit with consent of instructor, for a maximum of 8 units. *A-F grading only.*

KIN 6425 - Political Issues in Kinesiology

Units: 4

Current socio-political issues in Kinesiology are examined. Analysis of socio-political forces, key stakeholders, leadership, and mobilization strategies which influence goals and policies. May be repeated once for credit with consent of instructor, for a maximum of 8 units. *A-F grading only.*

KIN 6435 - Critical Perspectives on the Body

Units: 4

Explores the ways in which the body has been and is culturally created and shaped by socio-political concerns. The fields of exercise science, health/wellness, physical education, and sport will provide contexts to examine ideological influences on the body. May be repeated once for credit when content varies, for a maximum of 8 units. *A-F grading only.*

KIN 6445 - Social Inclusion in Physical Activity

Units: 4

Examines the social processes of exclusion and inclusion as they relate to physical activity, emphasizing a critical examination of the power dynamics of these practices. May be repeated once for credit with consent of instructor, for a maximum of 8 units. *A-F grading only.*

KIN 6470 - Seminar in Exercise and Nutrition

Units: 4

Biochemical and physiological responses related to nutrition and performance. Course may be repeated once for credit, for a maximum of 8 units.

KIN 6480 - Legal Applications in Kinesiology

Units: 4

Examines the legal and ethical parameters and issues related to all fields associated with Kinesiology. May be repeated once for credit with consent of instructor, for a maximum of 8 units. *A-F grading only.*

KIN 6605 - Teaching and Coaching Effectiveness

Units: 4

Research methodology and systematic observation as it relates to the effectiveness of educators in the subfields of Kinesiology. Instructional process of behaviors through describing, analyzing, and interpreting models and critical variables. *A-F grading only.*

KIN 6615 - Sport Education

Units: 4

Current trends in program offerings of Physical Education in grades 4-12. Emphasis on the tendency toward health/wellness-related orientation in Physical Education and the Sport Education Model. May be repeated once for credit with consent of instructor, for a maximum of 8 units. *A-F grading only.*

KIN 6655 - Physiological Perspectives on Health and Wellness

Units: 4

Contemporary issues on health and wellness across the lifespan. Acute and chronic physiological adaptations of physical activity and exercise on health and disease prevention. May be repeated once for credit with consent of instructor, for a maximum of 8 units. *A-F grading only.*

KIN 6670 - Training for Physical Performance

Units: 4

Physiological basis of exercise training to enhance physical performance. Emphasis on aerobic, anaerobic, and resistance training principles and program design to optimize performance. Acute responses and longer-term training adaptations will be examined. May be repeated once for credit with consent of instructor, for a maximum of 8 units. *A-F grading only.*

KIN 6700 - Seminar: Contemporary Issues in Kinesiology

Units: 4

Selected advanced topics of importance to the discipline of kinesiology.

KIN 6710 - Synthesis in Kinesiology

Units: 4

Focus on developing programs in a range of professional areas Kinesiology. Review history of the field of Kinesiology, current issues in the research and professional fields, and development of issues that take a cross-disciplinary approach. *A-F grading only.*

KIN 6850 - Supervised Research

Units: 2-4

Independent research under direction of faculty. May be repeated for credit with consent of advisor, for a maximum of 8 units.

KIN 6899 - Project

Units: 2-5

Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their format. Supervision by a department committee, at least one of whom must be a Cal State East Bay, faculty member. Oral defense may be required.

KIN 6900 - Independent Study

Units: 1-4

Independent study under direction of faculty. May be repeated for credit, with consent of advisor, for a maximum of 8 units.

KIN 6909 - Departmental Thesis

Units: 2-5

Development and writing of a research paper for submission to the department, which specifies its format. Supervision by a department committee, at least one of whom must be a member of the graduate faculty. Oral defense is required.

KIN 6910 - University Thesis

Units: 2-6

Development and writing of a formal research paper for submission to the University in the specified bound format. Supervision by a departmental committee, at least one of whom must be a graduate faculty member. (See also "University Thesis Writing Guide" available in the Student Services and Administration Building, Suite 4500.) Oral defense required.

KIN 6999 - Issues in Kinesiology and Physical Education

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in kinesiology and physical education. May be repeated for credit when content varies, for a maximum of 8 units.

Management

MGMT 3100 - Decision Science

Units: 4

A survey of statistical data analysis and management science models as they are applied for decision-making in organizations. Topics covered include: regression, correlation, forecasting models, linear programming applications, project management, simulation and decision analysis. Emphasis on usage of appropriate technology and applications of quantitative models.
Prerequisites: MATH 1810; STAT 2010 or STAT 1000; PC Software Proficiency satisfied.

MGMT 3110 - Project Management

Units: 4

Analysis of modern methods and tools of project management. Topics include project definition, time and resource scheduling, budgeting, risk management, and performance measurement. Emphasis on developing practical skills in managing projects through case studies and utilization of project management software. *Prerequisites: MATH 3100 or permission of instructor.*

MGMT 3115 - Supply Chain Data Analytics

Units: 4

Quantitative analysis of practical data-driven decisions in operations and supply chain management. Emphasis on determining best decisions, using methods and tools of big data analytics and application-based software. *Prerequisites: MGMT 3100, MGMT 3620, or consent of instructor. A-F grading only.*

MGMT 3560 - Business and Professional Ethics

Units: 4

(See PHIL 3560 for course description.)

MGMT 3600 - Theories of Management

Units: 4

Management is viewed as a process involving the utilization of human resources to accomplish organizational objectives. Critical analysis of descriptive and normative theories of formal organization, including a consideration of organization structure, communications, planning, and control.

MGMT 3610 - Strategic Human Resources Management

Units: 4

Fundamentals of strategic human resource management from the perspective of human resources professionals and general managers. Focus on how firms use human resource functions, such as recruitment and selection, training and development, performance management, compensation and benefits, to gain a competitive advantage. *Recommended MGMT 3600.*

MGMT 3612 - Seminar in Human Resources Management

Units: 4

Contemporary topics in human resources management to extend and integrate knowledge of HRM, and provide innovative HR perspectives and tools. *Prerequisites: Junior or higher standing.*

MGMT 3614 - Organizational Behavior

Units: 4

Current theory and research of individual and small group behavior in the organization. *Prerequisites: Junior or higher standing recommended.*

MGMT 3616 - Human Resources Assessment and Measurement

Units: 4

Procedures in selecting, placing, and evaluating employees. Topics include job analysis, interviews, ability and psychological tests, innovative assessment methods, and performance appraisals. *Prerequisites: MGMT 3614; STAT 2010 or STAT 1000.*

MGMT 3620 - Operations Management

Units: 4

Management operations in manufacturing and service organizations. Topics include: operations strategy in global environment, new product and service development, quality management and control, process and capacity management, supply chain management, inventory control, and lean management. *Prerequisites: ECON 3551 and MGMT 3100.*

MGMT 3624 - Supply Management and E-Procurement

Units: 4

Current advances in managing supply of goods and services, including strategic sourcing, computerized purchasing, online auction, contract design, enterprise software application, quality control, cost analysis, price negotiation, inventory management, and capital equipment procurement.

MGMT 3626 - Management for Quality Improvement

Units: 4

Elements of total quality management, methods of and techniques in quality assurance, statistical process control and acceptance sampling. Emphasis on decision making and applications in quality improvement. *Prerequisites: STAT 2010 or STAT 1000.*

MGMT 3645 - Global Supply Chain Management

Units: 4

An integrative perspective of managing supply chain in a global environment. Topics include designing supply chain network, strategic planning, supply chain coordination, resource allocation, capacity design, transportation management, material handling, and information technology in supply chain. *Prerequisites: MGMT 3620.*

MGMT 3680 - Employee Relations and Employment Law

Units: 4

The study of employee-management relations, including: the labor force; employment law, regulation and compliance; employee rights; performance management, discipline, and termination; alternative dispute resolution and grievance procedures; collective bargaining and preventative employee relations. *Prerequisites: FIN 3300; senior or graduating senior, and consent of instructor.*

MGMT 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least 2.0 GPA; departmental approval of activity.*

MGMT 3999 - Issues in Management

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in management.

MGMT 4500 - Business, Government, and Society

Units: 4

The relationships between business managers and the social, economic, and political environment within which they operate; business ethics, antitrust policy, social responsibility, and consumer protection. *Prerequisites: Senior standing or permission of instructor.*

MGMT 4520 - Negotiation and Conflict Resolution

Units: 4

Theories and strategies of conflict management within an employment context providing both first and third party skills. Topics include: negotiation, mediation, arbitration, ethics, and managing conflicts in a multicultural environment. *Prerequisites: MGMT 3600. A-F grading only.*

MGMT 4615 - Compensation and Reward Systems

Units: 4

Topics include wage and salary determination and administration, incentive compensation, benefits, performance evaluation, career-based incentives, managing turnover, stock options and executive compensation, labor law, unions, and compensation contracts. *Prerequisites: MGMT 3610.*

MGMT 4618 - Human Resources Training and Development

Units: 4

Systems approach to human resources training and development. Topics include needs assessments, learning theories, instructional design, training methodologies, presentation techniques, and program evaluation. Students will design and present sample training and development programs. *Prerequisites: MGMT 3610 and MGMT 3614.*

MGMT 4625 - Service Operations Management

Units: 4

Methods and practice for operating service business effectively and efficiently. Topics include new service development, analysis of service process, customer relationship management, waiting time reduction, yield management, enterprise resource planning, and information technology in service operations. *Prerequisites: MGMT 3620.*

MGMT 4640 - Enterprise Resource Management

Units: 4

Concepts and applications of managing available resources, such as material, labor, capacity, and financial capital, in both service and manufacturing organizations. Emphasis on developing practical skills in Internet era and utilizing modern business software in enterprise resource planning and e-commerce. *Prerequisites: MGMT 3620.*

MGMT 4650 - Seminar in Strategic Business Management

Units: 4

Capstone course that takes a top management perspective and integrates the functional disciplines into decision-making. Emphasis on evaluating complex business situations, integrating theory with practice, and presenting comprehensive strategic business plans. *Prerequisites: The following prerequisites are required and strictly enforced: FIN 3300; MGMT 3100; MGMT 4500 or ACCT 4911; MKTG 3401.*

MGMT 4660 - Seminar in Operations and Supply Chain Management

Units: 4

Introduction to the most recent developments in operations and supply chain management. Topics include, but not limited to, green supply chain and sustainable operations, healthcare operations, behavioral operations, supply chain risk management, product innovation and technology management, and service operations. *Prerequisites: MGMT 3620. A-F grading only.*

MGMT 4670 - Multinational Business

Units: 4

A study of the leading technical, environmental, and management features peculiar to the operation of the U.S. firms in foreign countries. *Prerequisites: Senior standing or permission of instructor.*

MGMT 4675 - International Human Resources Management

Units: 4

Seminar on how multinational firms develop human resource functions of recruitment, selection, training and development, performance appraisal, compensation and benefits, to compete internationally. Examine the cross-cultural basis of global HRM. *Prerequisites: MGMT 3610; MGMT 3614.*

MGMT 4900 - Independent Study

Units: 1-4

MGMT 6165 - Prescriptive Analytics

Units: 4

Determining the best solution among various choices, suggesting decision options, and illustrating the implications of each option. Topics include: optimization methods, decision making under uncertainty, queuing models, simulation, and application-based software. *Prerequisites: MGMT 6015 or consent of instructor. A-F grading only.*

Management: Graduate

MGMT 6015 - Data Analysis and Decision Modeling for Managers

Units: 4

Quantitative modeling and data analysis as they are applied for making managerial decisions in organizations. Topics include regression, correlation, forecasting models, optimization, decision analysis, project management, and simulation. Emphasis on usage of spreadsheet modeling and appropriate software technology. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update. A-F grading only.*

MGMT 6115 - E-Commerce Enterprise Management

Units: 4

Methods and applications of managing material, labor, and finance resources in service and manufacturing organizations utilizing computer-mediated network and World Wide Web. Emphasis on developing practical skills and using modern computer software in enterprise resource planning and e-commerce. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update.*

MGMT 6120 - Globalization, Innovation and Sustainability

Units: 4

An integrative overview of personal, organizational, inter-organizational and societal processes of innovation, centered on the central challenges and expanding range of business opportunities relating to environmental and social sustainability found in the context of a globalizing economy. (Recommended as one of the first core MBA courses.) *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update. A-F grading only.*

MGMT 6125 - Purchasing Management and Strategic Sourcing

Units: 4

Modern techniques in sourcing and negotiation, contract management, supply chain management, and computer-based purchasing systems. Seminar format with case studies and projects.

MGMT 6130 - Enterprise Planning and Control

Units: 4

Modern methods of planning and managing resources in an organization including aggregate planning, enterprise resource planning and control, short-term scheduling, and maintenance. Emphasis on developing practical skills and utilizing modern computer applications in enterprise resource planning and control. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update.*

MGMT 6141 - Service Operations Management

Units: 4

Contemporary methods and applications of service operations management, including those in service processes, planning, and scheduling. Seminar format with case studies, problem solving, and use of computer software. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update.*

MGMT 6145 - Logistics Management

Units: 4

The physical distribution of goods. Methods of logistics analysis, planning, and scheduling. Use of information technology in logistics and logistics information systems. Logistical support to e-business operations. Emphasis on problem solving and use of computer software. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update.*

MGMT 6150 - Global Supply Chain Management

Units: 4

Topics in global supply chain management, including synthesis of global logistics, operations, purchasing, and distribution into a cohesive strategy. Use of information technology, global strategic supply management planning, relationships, and quality. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update.*

MGMT 6155 - Applied Project Management

Units: 4

Analysis of modern methods and tools of project management. Topics include project definition, time and resource scheduling, budgeting, risk management, and performance measurement. Emphasis on developing practical skills in managing projects through case studies and utilization of project management software. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update. A-F grading only.*

MGMT 6160 - Data Analytics

Units: 4

Examining raw data to draw conclusions about information. Topics include a broad set of analytical methodologies, with a focus on multiple regression methods and time-series applications in big data analytics. *Prerequisites: MGMT 6015 or consent of instructor. A-F grading only.*

MGMT 6215 - Business, Government and Society

Units: 4

Strengthens students' ability to anticipate, critically analyze and appropriately respond to the legal and ethical dilemmas that confront managers in a global economy. This course focuses on the challenges of responsible decision-making in complex, socially diverse business environments. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update. A-F grading only.*

MGMT 6220 - Operations and Supply Chain Management

Units: 4

Integrative overview of management and control of the processes that create and deliver the goods and/or services of a firm. Topics covered include operations strategy, product/process design, quality management, supply chain management, inventory management, and lean management. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update. A-F grading only.*

MGMT 6225 - Executive Leadership

Units: 4

Managers leverage people to meet and exceed performance expectations. Leadership is a critical means to this end. Practice of visioning, motivating, decision making, communicating effectively, managing group dynamics and using power and influence will establish your path to leadership. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update. A-F grading only*

MGMT 6420 - Competitive Strategy

Units: 4

Integrative treatment of competitive strategy, using research findings and cases. Emphasis is on industry analysis, competitive rivalry, and competitive advantage. Objective is to develop an analytical understanding of the factors that contribute to sustainable competitive advantage. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update.*

MGMT 6440 - Global Strategy

Units: 4

Integrative treatment of global strategic management and strategic alliances. Emphasis is on the firm in the global competitive context, decisions to enter markets, how to compete in global markets, and how to develop and implement a global strategy. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update.*

MGMT 6460 - Strategic Management for a Sustainable Society

Units: 4

Examines the strategic management of environmental issues and the functional and strategic responses of firms to deal with environmental issues. The domain of strategy and industry is expanded to incorporate environmental issues. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update.*

MGMT 6470 - Management of Technology and Innovation

Units: 4

Examines the management of technology and innovation, the strategic problems of firms in high technology industries, with special attention to market structure, standards issues, and strategic responses by firms in highly turbulent environments. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update.*

MGMT 6520 - Negotiation for Managers and Entrepreneurs

Units: 4

Managerial and entrepreneurial success requires agreement and collaboration with people both within and between firms. This course will examine a broad spectrum of negotiation settings to help you develop the skills needed to best negotiate deals and resolve problems. These skills build on core communication skills to focus on conflict mapping, distributive and integrative

bargaining, alternate dispute resolution methods, and cultural patterns, to develop effective tactics in negotiations. *Prerequisites:* ***See Errata chapter in this catalog concerning prerequisite update.**

MGMT 6560 - High Performance Management

Units: 4

Development of skills essential for high performing managers. Interactive course using combination of self-assessment instruments, experiential exercises, and cases to help you develop critical skills in building and managing high performing teams, communications, goal-setting, empowering people, persuasion, and dispute resolution. *Prerequisites:* ***See Errata chapter in this catalog concerning prerequisite update.**

MGMT 6612 - Strategic Human Resources: Frameworks for General Managers

Units: 4

Application of theories from economics and organizational behavior to analyze core topics in strategic human resources management, including recruitment and screening, training, performance evaluation, compensation and benefits, job design, promotions, downsizing, outsourcing, unions, labor law, internal labor markets, and high-commitment HRM. *Prerequisites:* ***See Errata chapter in this catalog concerning prerequisite update.**

MGMT 6613 - Topics in Human Resource Management

Units: 4

In-depth examination of a specific best practice or current issue in human resource management/industrial relations, such as Creativity and Innovation, Organizational Design and Change Management, or Managing Virtual Teams. *Prerequisites:* ***See Errata chapter in this catalog concerning prerequisite update.**

MGMT 6615 - Strategic Compensation, Incentives, and Productivity

Units: 4

Examines design of compensation and benefits systems to attract, retain, and motivate top talent in a dynamic organizational environment shaped by market, political, legal, and union constraints. Incentive pay, deferred compensation, pensions, layoffs, buyouts, corporate raiding, promotions, performance evaluation, etc. *Prerequisites:* ***See Errata chapter in this catalog concerning prerequisite update.**

MGMT 6618 - Selecting, Maintaining and Retaining Employees

Units: 4

Students will understand regulations regarding hiring, execute successful job analyses for job descriptions, pre-employment selection tools (e.g. behavioral interviews) with psychometric tools, develop training and employee development programs to retain employees, use motivation theory and successfully implement a performance system. *Prerequisites:* ***See Errata chapter in this catalog concerning prerequisite update.** Not open to students with credit for MGMT 4618.

MGMT 6622 - Human Resources Information Systems

Units: 4

Administration of human resources information systems. Topics include the uses and content of HRIS, effective organization and implementation of information systems, legal and ethical considerations of HRIS, effective reporting for management and employee users, and review of widely utilized systems. *Prerequisites:* ***See Errata chapter in this catalog concerning prerequisite update.**

MGMT 6675 - International Human Resource Management

Units: 4

Learn to execute global best practice HR functions such as recruitment, selection, compensation and management development of employees the world over in order to stay globally competitive. Understand the impact of national and corporate culture on organizations. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update.*

MGMT 6800 - Seminar in Strategic Management

Units: 4

An integrative capstone experience in which students learn to conduct a strategic situational analysis, identify strategic alternatives and write an implementation plan for a strategic initiative. Real world organizational opportunities relating to globalization, innovation and sustainability will be emphasized. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update. A-F grading only.*

MGMT 6898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities within the quarter enrolled. *CR/NC grading only.*

MGMT 6900 - Independent Study

Units: 1-4

MGMT 6909 - Departmental Thesis

Units: 1-4

Development and writing of a research paper for submission to the department which specifies its format. Supervision by a faculty committee at least one of whom must be a Cal State East Bay faculty member.

MGMT 6910 - University Thesis

Units: 1-5

Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See "University Thesis Writing Guide," www.csueastbay.edu/thesiswritingguide.)

MGMT 6999 - Issues in Management Sciences

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in management sciences.

Marine Science

GEOL 4141 - Geological Oceanography

Units: 6

A study of the structures, physiography and sediments of the sea bottom and shoreline. One field trip. Recommended: any course

in general oceanography (concurrent registration satisfactory). *Prerequisites: GEOL 3702.* Not open to students with credit for GEOL 4141. Three hrs. lect., 3 hrs. lab.

GEOL 4142 - Physical Oceanography

Units: 6

An introduction to the nature and causes of various oceanic motions including currents, waves, tides, and mixing and the physical properties of seawater. Limited use of calculus. Recommended: college physics. *Prerequisites: College algebra* Three hrs. lect., 3 hrs. lab.

GEOL 4143 - Chemical Oceanography

Units: 6

An introduction to the theoretical and practical aspects of the chemistry of the oceans, including major salts, dissolved gases, nutrient ions, carbonate system, transient tracers, and shipboard sampling techniques. *Prerequisites: One year college chemistry.* Two hrs. lect., 6 hrs. lab.

GEOL 4900 - Independent Study

Units: 1.5-6

May be repeated for credit with consent of instructor, for a maximum of 12 units.

MSC 4103 - Marine Ecology

Units: 6

A field oriented introduction to the interrelationships between marine and estuarine organisms and their environment with emphasis on quantitative data collection and analysis. *Prerequisites: BIOL 3110, STAT 3031 or equivalent and consent of instructor.* Two hrs. lect., 6 hrs. lab/field.

MSC 4104 - Quantitative Marine Science

Units: 6

Mathematical methods for analysis of biological, chemical, and physical data from the marine environment; experimental design, parametric and non-parametric statistics; computers and programming techniques. *Prerequisites: Basic college math.* Not for Biological Science B.S. degree credit or for Marine Science M.S. degree credit. Three hrs. lect., 3 hrs. lab.

MSC 4105 - Marine Science Diving

Units: 4.5

Scientific SCUBA diving course. Diving physics, physiology, dive planning, research diving techniques, marine life identification, and diver rescue. Open water diver training includes navigation, search and light salvage, scientific methods, small boat diving, photography and videography, and night diving. *Prerequisites: Certified SCUBA diver (or equivalency as determined by instructor), upper division science major status, thorough physical examination, ability to pass swimming test, instructor's consent.* One hr. lect., 6 hrs. lab.

MSC 4112 - Marine Birds and Mammals

Units: 6

Systematics, morphology, ecology, and biology of birds and mammals. MSC 4103 recommended as prerequisite. *Prerequisites: BIOL 3580.* Two hrs. lect., 6 hrs. lab./field.

MSC 4113 - Marine Ichthyology

Units: 6

The taxonomy, morphology and ecology of marine fishes. *Prerequisites: BIOL 1403 or BIOL 3580.* Not open to students with credit for BIOL 4570. Two hrs. lect., 6 hrs. lab./field.

MSC 4124 - Marine Invertebrate Zoology I

Units: 6

A field oriented introduction to the structure, systematics, evolution and life histories of the major and minor marine phyla. MSC 4103 recommended as prerequisite. *Prerequisites: College zoology or consent of instructor.* Not open to students with credit for BIOL 3521-BIOL 3522. Two hrs. lect., 6 hrs. lab/field.

MSC 4125 - Intertidal Invertebrates of California

Units: 4.5

A field oriented introduction to the structure, systematics, evolution and life histories of the minor marine invertebrate phyla. MSC 4103 and MSC 4124 recommended as prerequisite. *Prerequisites: BIOL 140.* Not open to students with credit for BIOL 3521-BIOL 3522. One hr. lect., 6 hrs. lab/field.

MSC 4131 - Marine Botany

Units: 6

Introduction to the plants of the sea, marshes, and dunes, with emphasis on the morphology, taxonomy and natural history of seaweeds and vascular plants. MSC 4103 recommended as prerequisite. Two hrs. lect., 6 hrs. lab/field.

MSC 4135 - Physiological Ecology of Marine Algae

Units: 6

Biology of seaweeds and phytoplankton, modern methods in algae physiological research including respiration, enzyme activity, biochemical composition. Modern methods in algae physiological research, hands-on experience in basic electronic instrumentation, chemical separations, optical measurements, culturing methods, radioisotope techniques. *Prerequisites: MSC 4103, MSC 4131, MSC 4144, or consent of instructor.* Two hrs. lect., 6 hrs. lab/field.

MSC 4144 - Biological Oceanography

Units: 6

The ocean as an ecological system. Emphasis on the complexity of organismal-environmental interaction of the plankton, the transfer of organic matter between trophic levels and nutrients cycles. Laboratory sessions will include methods in sampling, shipboard techniques, identification of the plankton, and current analytical techniques. *Prerequisites: General biology, general chemistry.* Two hrs. lect., 6 hrs. lab.

MSC 4900 - Independent Study

Units: 1.5-6

May be repeated for credit with consent of instructor, for a maximum of 12 units.

Marine Science: Graduate

Units are quarter units, class hours are weekly on semester calendar.

MSC 6201 - Graduate Studies in Marine Science: Library Research

Units: 1.5

Fundamental library skills to conduct library research and evaluate sources; extensive introduction to Internet search tools; strong emphasis on ability to critically evaluate bibliographic tools and sources; copyright, intellectual property, and scholarly publishing. *Prerequisites: Graduate standing in MLML's program, consent of instructor.*

MSC 6202 - Oceanographic Instrumentation

Units: 6

Principles of instruments used in oceanographic research, introduction to electronics, and applications of instrument measurements. *Prerequisites: MSC 4141, 4142, and consent of instructor.*

MSC 6204 - Sampling and Experimental Design

Units: 6

Basic design of experiments and field sampling; random sampling, systematic sampling, subsampling, survey techniques, and design of single and multifactorial experiments using randomized and block experimental designs. *Prerequisites: MSC 4103 and MSC 4104.* Four hrs. lect.

MSC 6206 - Molecular Biological Techniques

Units: 6

Laboratory-based overview of concepts and techniques for the isolation, characterization, and analysis of DNA and RNA; standard methods (amplification, cloning, sequencing) and selected specialized techniques (analysis of gene expression), emphasizing marine science applications.

MSC 6208 - Scientific Methods

Units: 6

Research information and skills for graduate students covering scientific writing, design of experiments and sampling programs, and the use of the library and other resources.

MSC 6211 - Ecology of Marine Birds and Mammals

Units: 6

Community approach to ecology of marine birds and mammals using experimental and sampling methodology, examining the distribution, abundance, trophic ecology, and behaviors of birds and mammals in Elkhorn Slough and Monterey Bay.

MSC 6212 - Advanced Topics in Marine Vertebrates

Units: 6

MSC 6221 - Advanced Topics in Marine Invertebrates

Units: 6

Advanced considerations of the ecology, physiology, and phylogeny of the various invertebrate phyla emphasizing current literature and research. Topics and emphasis vary from term to term. May be repeated for credit with consent of instructor.

MSC 6231 - Biology of Seaweeds

Units: 6

Lecture-discussion on marine macroalgal biology with extensive reading of original literature. Ecologically oriented individual research projects involving laboratory culture and field experimentation.

MSC 6233 - Advanced Topics in Marine Ecology

Units: 1.5-6

Selected topics and current issues in marine ecology. The subjects vary depending on student demand and availability of instructors. May be repeated for credit with consent of instructor. (On demand)

MSC 6234 - Advanced Biological Oceanography

Units: 6

A continuation of biological oceanographic studies. Lectures and discussion of special topics such as human impact on the marine environment. Critical analyses of current literature. An individual research project involving the use of one or more available analytical tools is required.

MSC 6242 - Plate Tectonics

Units: 4.5

Historical background, modern theory and geophysical evidence of continental drift, sea floor spreading and plate tectonics. Examinations of the impact of the recent revolution in historical geology. *Prerequisites: MSC 4141 or consent of instructor.* Three hrs. lect.

MSC 6246 - Geology of the Monterey Bay Region

Units: 6

Geology, tectonic, and active, naturally occurring processes in the Monterey Bay region; geologic and tectonic history of central California, plate tectonic processes and representative stratigraphy and geomorphology of Monterey Bay region. *Prerequisites: Graduate standing and consent of instructor.* Three hrs. lect., 9 hrs. lab.

MSC 6248 - Marine Benthic Habitat Techniques

Units: 6

Collection and interpretation of geophysical data used to characterize marine benthic habitats. Basic geophysical principles will be reviewed. Application of techniques to identify and characterize marine benthic habitats, including echosounders, multibeam bathymetry and backscatter, sidescan sonar, seismic profiling, and GIS. *Prerequisites: Graduate standing and consent of instructor.* Three hrs. lect., 9 hrs. lab.

MSC 6251 - Marine Geochemistry

Units: 6

Geochemical processes in the oceans: thermodynamics of low temperature aqueous reactions, weathering, oxidation-reducing

and biologically mediated reaction, processes occurring at the sea floor and air-sea interface. *Prerequisites: MSC 4143, quantitative analysis, one year of calculus, or consent of instructor.* Two hrs. lect., 6 hrs. lab.

MSC 6261 - Ocean Circulation and Mixing

Units: 6

The mathematical description of the distribution of properties (density, dissolved oxygen, etc.) in the oceans relating to physical and biochemical processes. Theory of distribution of variables, geostrophic method. *Prerequisites: MSC 4142 and college physics strongly recommended; one year of calculus, or consent of instructor.* Three hrs. lect., 3 hrs. lab.

MSC 6262 - Satellite Oceanography

Units: 6

Physical principles of remote sensing with application to the oceans, including satellite image processing methods. Labs involve use of PC and Unix workstation. Strongly Recommended: Strongly recommended prerequisite: MSC 6263. *Prerequisites: MSC 4142 and MSC 4144, or consent of instructor.* Two hrs. lect., 6 hrs. lab.

MSC 6263 - Application of Computers in Oceanography

Units: 6

Discussion and technical programming with MATLAB for computation and visualization with applications in marine sciences; use of existing program libraries for data I/O and analysis. Semester project required. *Prerequisites: College math and consent of instructor.* Two hrs. lect., 6 hrs. lab.

MSC 6271 - Population Biology

Units: 4.5

Principles involved in interaction among marine organisms which result in the alteration of population structures. Techniques for assessment and management of animal populations. Not open to students with credit for BIOL 6170.

MSC 6272 - Subtidal Ecology

Units: 6

The ecology of nearshore rocky subtidal populations and communities with emphasis on kelp forests. Lectures and discussions of original literature. Field work with SCUBA including group projects on underwater research techniques and community analysis, and individual research on ecological questions chosen by the student. Recommended prerequisite: knowledge of marine algae, invertebrates, and statistics.

MSC 6273 - Marine Environmental Studies of the Gulf of California

Units: 6

Analysis of Gulf of California marine environments; intensive field work; required scientific paper based on original research; topics vary. Taught with faculty and students from LaPaz, Mexico. Required two-week field trip in June. Three hrs. lect., 9 hrs. lab.

MSC 6274 - Advanced Topics in Oceanography

Units: 1.5-6

The study of a selected area in oceanography. The subjects vary depending on student demand and availability of instructors. *Prerequisites: Consent of instructor.* May be repeated for credit with consent of instructor.

MSC 6280 - Scientific Writing

Units: 3

MSC 6280 - Scientific Writing

Units: 3

The techniques and strategies of scientific writing used for proposals, journal submissions, and abstracts of meetings. Students will develop their writing skills by preparing, editing, and rewriting manuscripts. *Prerequisites: Graduate standing and consent of instructor.* Two hrs. lect/disc.

MSC 6281 - Coastal Dynamics

Units: 6

Oceanographic dynamics of coastal environments, with an emphasis on eastern boundary current systems influenced by coastal upwelling. Focus on how physical and geological oceanography interact with each other and how both affect coastal ecosystem dynamics. *Prerequisites: Graduate standing and MSC 4141 or MSC 4142.* Three hrs. lect.; 4 hrs. lab.

MSC 6285 - Graduate Seminar in Marine Science

Units: 3

A seminar in marine science for presentation and discussion of advanced studies in special fields. *Prerequisites: Graduate standing and consent of instructor.* May be repeated once for credit, for a maximum of 6. Two hrs. seminar, discussion.

MSC 6900 - Independent Study

Units: 1.5-6

MSC 6900 - Independent Study

Units: 1.0-9

MSC 6910 - University Thesis

Units: 1.5-6

Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See also, "University Thesis Writing Guide" www.csueastbay.edu/thesiswritingguide.) *Prerequisites: Graduate standing. Maximum of 6 units per student. CR/NC grading only.*

MSC 6910 - University Thesis

Units: 1.5-6

Development and writing of a formal research paper for submission to the University in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See also "University Thesis Writing Guide," www.csueastbay.edu/thesiswritingguide.) *Prerequisites: Graduate standing. Maximum of 6 quarter units per student.*

Marketing

MKTG 3401 - Marketing Principles

Units: 4

Introduction to marketing principles, functions, and methods in creating and delivering value; evolution of the modern marketing system; market structure; internal and external variables in the design of marketing program including product, price, promotion, and distribution; social, legal, and ethical responsibilities of marketing. *Prerequisites:* Recommended prerequisite or co-requisite: ECON 2301.

MKTG 3410 - Advertising Management

Units: 4

Managing the firm's advertising function: defining the market; integrating advertising into the marketing mix; setting advertising goals and budgets; developing message strategy and media plan; evaluating advertising campaigns, monitoring and assessing advertising expenditures; research applications; societal evaluation and regulation. *Prerequisite or Co-requisite: MKTG 3401.*

MKTG 3415 - Personal Selling

Units: 4

Theory and practice of personal selling in individual and small group settings. Skills development in product knowledge, customer analysis, listening, prospecting techniques, sales presentation, closing methods, and the place of selling within business. Student Project. *Prerequisites: MKTG 3401 or consent of instructor.*

MKTG 3425 - Promotion

Units: 4

Management of marketing promotional functions including personal selling, sales promotions, advertising, and publicity/public relations. Comparison of promotions for profit/non-profit organizations, products/services, and consumer/industrial markets. Student project. *Prerequisites: MKTG 3401.*

MKTG 3440 - Products and Pricing

Units: 4

The process of both consumer and industrial product development, based on marketing intelligence, product introduction, strategy and pricing throughout product life cycle. Field observation and case discussion. *Prerequisites: MKTG 3401.*

MKTG 3445 - Marketing Research

Units: 4

Training in the process and techniques of marketing research. Topics include problem formulation, research design, development of research instrument, data collection and analysis, and report writing and presentation. Hands-on experience emphasized. *Prerequisites: MKTG 3401; STAT 2010 or STAT 1000; PC Software Proficiency completed.*

MKTG 3495 - Business Communication

Units: 4

Applications of logical and creative thinking, and oral and written communications in the administrative decision-making process in business organizations. Enrollment priority given to Business Administration and Economics majors, then Business Administration minors. *Prerequisites: Junior standing; either C- (CR) or better in ENGL 3000 or ENGL 3001, or score of 7 or better on the Writing Skills test, or satisfaction of the graduation writing assessment requirement (GWAR) at any CSU campus including the UWSR at Cal State East Bay. Credit unavailable through challenge*

MKTG 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least 2.0 GPA; departmental approval of activity. CR/NC grading only.*

MKTG 3999 - Issues in Marketing and Entrepreneurship

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in marketing and entrepreneurship.

MKTG 4400 - Integrated Marketing Management

Units: 4

An integrative perspective of marketing management. Students acquire knowledge and skills in applying marketing mix variables in competitive decision making environments. Lectures, simulation, and/or cases used to emphasize integration of marketing mix variables. *Prerequisites: MKTG 3401; any one course from MKTG 3410, MKTG 3425, MKTG 3440, MKTG 3445, and MKTG 4417.*

MKTG 4412 - Media Planning

Units: 4

Media choice related to advertising and promotion strategies; media data sources, syndicated services. Researching media for a specific product, structuring optimum media mixes, developing/managing media budgets; using computers and commercial computer services in deriving media schedules. *Prerequisites: MKTG 3401.*

MKTG 4415 - Corporate Communications

Units: 4

Development of organizational image campaigns by identifying corporate culture, corporate image, intraorganizational goals. Determining media strategies, tactics, and tools for lobbying, trade organization relations, press agency, publicity, internal communications, and public opinion research included in the context of social responsibility. Student project. Recommended prerequisites: MKTG 3401; MGMT 3600, MGMT 3680.

MKTG 4417 - Consumer Behavior

Units: 4

Survey of theoretical foundations of consumer decision-making; in-depth analysis of contemporary factors influencing consumer behavior, including social, cultural, and psychological dimensions; extensive outside readings and case applications; student project required. Recommended: PSYC 1000 (or one of PSYC 1001 or PSYC 1005). *Prerequisites: MKTG 3401.*

MKTG 4435 - Services Marketing

Units: 4

Theory and practice of services marketing to enhance marketing knowledge. Development of skills in critical thinking, service quality analysis, and development of services through case analyses, student projects, and/or exercises. *Prerequisites: MKTG 3401.*

MKTG 4450 - Marketing Seminar

Units: 4

Selected topics emphasizing the integration of marketing literature with current business practices through seminar discussions and individual field investigations. *Prerequisites: MKTG 3401 and consent of instructor.*

MKTG 4470 - International Marketing

Units: 4

Marketing management problems and techniques in international business. Recommended: MGMT 4670 or ECON 3107. *Prerequisites: MKTG 3401.*

MKTG 4585 - E-Commerce Marketing

Units: 4

E-Commerce marketing issues and problems. Understanding e-customers, characteristics of electronic marketplace, marketing implication of information technologies, and e-marketing strategies and tactics. *Prerequisites: MKTG 3401 or consent of instructor.*

MKTG 4900 - Independent Study

Units: 1-4

Marketing: Graduate

MKTG 6120 - Managerial Communication

Units: 4

Managerial communication concepts, tools, and skills. Emphasis on building effective oral and written communication skills. Apply communication tools and knowledge: self-assessment; theory of human communication; interpersonal communication; organizational communication; and intercultural communication. (Recommended as one of the first core MBA courses.) *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update. A-F grading only.*

MKTG 6215 - Marketing Management

Units: 4

Core marketing management issues in a changing business environment, conceptual knowledge, analytical tools, and problem solving skills applicable to marketing. Topics include environmental scanning; target marketing process; customer relationship management; managing product, price, distribution, and promotion; and marketing control. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update. A-F grading only.*

MKTG 6401 - Marketing Research

Units: 4

Knowledge and training in process and techniques of acquiring, analyzing, interpreting and reporting information for decision-making. Topics include data collection instruments, sampling plan, statistical analysis and reporting of results. Hands-on learning is emphasized through assignments and/or project. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update.*

MKTG 6410 - Buyer Behavior

Units: 4

Theories, concepts, methods, and empirical findings regarding buyers' decision-making processes and choice behavior from buyers, marketers, and public policy makers' perspectives. Lectures, discussion of research articles, case analysis, and research project emphasized. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update.*

MKTG 6411 - Product Management

Units: 4

Knowledge and skills in the process of designing and marketing of new and existing products. Topics include product design, product positioning, market definition, segmentation, test marketing, and demand forecasting. Lectures, cases, and hands-on experience emphasized. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update.*

MKTG 6412 - Pricing Management

Units: 4

Pricing strategies, tactics, methods, laws, treatment of costs, effect of sales promotion, consideration of competition and customers for pricing. Lectures, discussion of relevant articles, and analyses of cases and pricing problems emphasized.

MKTG 6413 - Integrated Marketing Communications

Units: 4

Students learn marketing communications and promotion and apply knowledge and skills to develop an integrated marketing communication plan. Students learn decision techniques for positioning a brand using appropriate mix of advertising, sales promotion, sales force, and public relations. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update.*

MKTG 6414 - Distribution Management

Units: 4

Students learn about marketing channels and design and manage appropriate channels and logistics for a variety of products. Lecture, project, case studies, and/or a simulation may be used to assist students in understanding distribution models. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update.*

MKTG 6450 - Seminar in Selected Marketing Topics

Units: 4

Concepts, tools and techniques associated with a special topic in marketing such as consumer behavior, or application of marketing to a specific situation such as business-to-business marketing, international marketing, marketing through the Internet. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update.*

MKTG 6470 - International Marketing

Units: 4

Using cases and a project, students learn how to respond to differences in the cultural, political, legal and economic environments in other countries in designing effective market-entry, segmentation, positioning, and marketing-mix strategies. Ethical issues confronting global marketers are also discussed. *Prerequisites: *See Errata chapter in this catalog concerning prerequisite update.*

MKTG 6898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities within the quarter enrolled. May be repeated for credit, for a maximum of 8 units. No units may be counted toward any CBE graduate degree. *CR/NC grading only.*

MKTG 6900 - Independent Study

Units: 1-4

MKTG 6909 - Departmental Thesis

Units: 1-4

Development and writing of a research paper for submission to the department which specifies its format. Supervision by a faculty committee at least one of whom must be a Cal State East Bay faculty member.

MKTG 6910 - University Thesis

Units: 1-5

Development and writing of a formal research paper for submission to the University in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See also "University Thesis Writing Guide," www.csueastbay.edu/thesiswritingguide.)

MKTG 6999 - Issues in Marketing

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in marketing. May be repeated for credit when content varies, for a maximum of 8 units.

Mathematics

MATH 1110 - The Nature of Mathematics

Units: 4

This course is designed to introduce the student to mathematics as an art and mathematics as a tool, emphasizing the place of mathematics in today's world. Will satisfy the general education requirement for non-majors. *Prerequisites: Satisfactory completion of Entry-Level Mathematics requirement. Must complete course with a grade of "C-" or better in order to earn General Education, Area B4, credit.* Upper division mathematics and computer science majors will not receive credit for this course.

MATH 1130 - College Algebra

Units: 4

Functions and graphs: polynomials, rational functions, exponential and logarithmic functions. See note at beginning of course listings. *Prerequisites: Satisfactory completion of Entry-Level Mathematics requirement. Must complete course with a grade of "C-" or better in order to earn General Education, Area B4, credit.* Upper division mathematics and computer science majors will not receive credit for this course.

MATH 1300 - Trigonometry and Analytic Geometry

Units: 4

Definitions, properties and graphs of the trigonometric functions. Applications. Analytic geometry of conic sections. A preparatory course for calculus. *Prerequisites: MATH 1130 or departmental permission. Must complete course with a grade of "C-" or better in order to earn General Education, Area B4, credit.*

MATH 1304 - Calculus I

Units: 4

Differential calculus. Limits and continuity. Exponential and logarithmic functions. Techniques and applications of differentiation. *Prerequisites: MATH 1300 or departmental permission. Must complete course with a grade of "C-" or better in order to earn General Education, Area B4, credit.*

MATH 1305 - Calculus II

Units: 4

Integral calculus. The indefinite integral, area, the Fundamental Theorem and techniques of integration. Applications to volume, arc length, physical and biological problems. *Prerequisites: MATH 1304.*

MATH 1810 - Mathematics for Business and Social Sciences

Units: 4

Functions and graphs; exponential and logarithmic functions; mathematics of accounting and finance; matrices and systems of equations; geometric approach to linear programming; introduction to differential and integral calculus with applications to business and social sciences. *Prerequisites: MATH 1130 or departmental permission. Must complete course with a grade of "C-" or better in order to earn General Education, Area B4, credit.*

MATH 2011 - Number Systems

Units: 4

Structure of number systems, place value, whole numbers, integers, fractions, decimals, real numbers. Standard and nonstandard algorithms, mental computation. Algebra as generalized arithmetic. Divisibility, prime and composite numbers, GCF, LCM. Ratio, proportion, percents. *Prerequisites: Satisfactory completion of the Entry Level Mathematics (ELM) requirement.* Not open to students with credit for MATH 4021. Intended for prospective elementary and junior high school teachers; Mathematics and Computer Science majors will not receive credit for this course.

MATH 2101 - Elements of Linear Algebra

Units: 4

Vector spaces, linear transformations, matrices, systems of linear equations. Stress on 2 and 3 dimensions, including geometric and other applications. *Prerequisites: MATH 1305.*

MATH 2150 - Discrete Structures

Units: 4

Topics in discrete mathematics. Elementary logic, set theory, and relations; induction, enumeration techniques, recurrence relations, trees and graphs. Boolean algebra, algorithm analysis. *Prerequisites: MATH 1304.*

MATH 2304 - Calculus III

Units: 4

Infinite series, convergence of power series. Vectors in space. Partial derivatives, chain rule, directional derivative and gradient. Curves and surfaces. Maxima and minima. Multiple integrals. *Prerequisites: MATH 1305.*

MATH 2305 - Calculus IV

Units: 4

Definite integrals over plane and solid regions in various coordinate systems. Vector functions and their derivatives and integrals. Motion in space. Line and surface integrals. Green's theorem, Stokes' theorem, divergence theorem. *Prerequisites: MATH 2304.*

MATH 3000 - Introduction to Abstract Mathematics and Proofs

Units: 4

Introduction to methods and proof techniques in several branches of mathematics, with topics chosen from logic, set theory, abstract algebra, number theory, analysis, and graph theory. Provides a transition from lower division mathematics courses, which concentrate on computation, to upper division proof-oriented mathematics courses. *Prerequisites: MATH 2304. Co-requisites: MATH 2101.*

MATH 3100 - Linear Algebra

Units: 4

Abstract vector spaces, linear transformations, matrices and determinants. Dual spaces and inner product spaces. Eigenvalues and eigenvectors. *Prerequisites: MATH 2101 and either MATH 2150 or MATH 3000. (MATH 3000 is strongly encouraged for mathematics majors and may be taken concurrently with MATH 3100.)*

MATH 3121 - Abstract Algebra I

Units: 4

Groups and Subgroups, permutation groups and factor groups. Homomorphisms and Isomorphisms. An introduction to Rings, Polynomial Rings, and Factorization. Selected topics as time permits. *Prerequisites: MATH 2101 and either MATH 2150 or MATH 3000. (MATH 3000 is strongly encouraged for mathematics majors and may be taken concurrently with MATH 3121.)*

MATH 3122 - Abstract Algebra II

Units: 4

Rings and fields: integral domains, ideals, quotient rings, polynomial rings, roots of polynomials, algebraic extensions and finite fields. Selected topics as time permits. *Prerequisites: MATH 3121.*

MATH 3151 - Combinatorics

Units: 4

Theory of counting, including partitions, Stirling numbers, generating functions. Applications of Burnside's lemma from multiple transitivity to the Polya-Redfield Theorem. Ferrers diagrams, symmetric functions, and majorization. *Prerequisites: MATH 2101 and either MATH 2150 or MATH 3000.*

MATH 3215 - Geometry I

Units: 4

A rigorous, axiomatic approach to neutral and Euclidean geometry from an advanced standpoint. An introduction to non-Euclidean Geometries. Topics in Euclidean geometry to include congruence, area, parallelism, similarity, properties of circles

and triangles, constructions, analytic and transformational geometry. *Prerequisites: MATH 2101 and either MATH 2150 or MATH 3000.* (*MATH 3000* is strongly encouraged for mathematics majors and may be taken concurrently with MATH 3215.)

MATH 3300 - Analysis I

Units: 4

Field properties of the real and complex numbers. Sequences of real numbers, Bolzano-Weierstrass theorem. Topology of \mathbb{R}^n , metric spaces, connected and compact sets. Limits, continuity, intermediate and extreme value theorems. Other topics as time permits. *Prerequisites: MATH 2101 and either MATH 2150 or MATH 3000.* (*MATH 3000* is strongly encouraged for mathematics majors and may be taken concurrently with MATH 3300.)

MATH 3301 - Analysis II

Units: 4

Continuity, uniform continuity. Sequences and series of functions. Differentiation, chain rule, implicit and inverse function theorems. Introduction to Riemann Integration. *Prerequisites: MATH 3300.*

MATH 3331 - Differential Equations

Units: 4

Methods of solution and applications of first order differential equations. Linear n -th order equations with emphasis on equations of 2nd order. Other topics may include power series solutions, Laplace transforms, linear systems. *Prerequisites: MATH 2304.*

MATH 3361 - Ordinary Differential Equations

Units: 4

Series solution of linear differential equations with variable coefficients, two point boundary value problems, systems of differential equations, phase plane analysis. *Prerequisites: MATH 2101 and MATH 3331.*

MATH 3600 - Number Theory

Units: 4

Euclid's algorithm, prime numbers, congruences, theorems of Fermat and Euler, quadratic residues. *Prerequisites: MATH 2101 and either MATH 2150 or MATH 3000.* (*MATH 3000* is strongly encouraged for mathematics majors and may be taken concurrently with MATH 3600.)

MATH 3750 - Numerical Analysis I

Units: 4

Basic numerical methods and analysis; practical solutions of problems from engineering, science, and mathematics. Computer representation of real numbers, errors, root finding, interpolation, numerical integration, ordinary differential equations. *Prerequisites: CS 1160, MATH 2101 and MATH 2304.* Cross-listed CS 3750.

MATH 3841 - Linear Programming

Units: 4

Problems of maximizing or minimizing a linear function subject to linear constraints; typical applications involve planning ("programming") the allocation of limited resources to achieve an optimal result. Topics include problem formulation, solution procedures, duality theory, sensitivity analysis, special problems (e.g., transportation and assignment problems). *Prerequisites: MATH 2304 and competence in matrix algebra.*

MATH 3865 - Mathematical Modeling

Units: 4

Discrete and continuous mathematical models. General introduction to the use of difference and differential equations, probability and statistics, and matrices for solving realistic problems. Computer simulation. Emphasis on effective written reports. *Prerequisites: MATH 2101 and MATH 2304.*

MATH 3875 - Mathematical Physics

Units: 4

Mathematics theory and methods with applications to physics. In class physics laboratory explorations will utilize mathematical techniques to better understand physics phenomena. *Prerequisites: MATH 1305. Co-requisites: MATH 2304.* Cross-listed PHYS 3875.

MATH 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least 2.0 GPA; departmental approval of activity; completion of lower division Mathematics major requirements and upper division standing. A maximum of 2 units will be accepted toward the Mathematics major.* May be repeated for credit, for a maximum of 8 units. *CR/NC grading only.*

MATH 4012 - Geometry and Measurement

Units: 4

Properties of 2- and 3-dimensional figures including congruence, similarity, proportional reasoning, area, perimeter, volume, surface area. Informal constructive proofs of properties of angles, polygons, parallel lines and the Pythagorean theorem. Transformational geometry. Measurement systems, estimation, coordinate geometry. *Prerequisites: MATH 2011.* Not open to students with credit for MATH 4022. Intended for prospective elementary and junior high school teachers; Mathematics and Computer Science majors will not receive credit for this course.

MATH 4013 - Statistics, Data Analysis, and Probability

Units: 4

Displaying and interpreting data via graphs, tables and charts. Descriptive statistics, including mean, median, mode and range. Basic Survey design, including possible sources of biases. Elementary discrete probability. Dependent and independent events. *Prerequisites: MATH 2011 and satisfactory completion of the Entry Level Mathematics requirement.* Cross-listed STAT 4013. Not open to students with credit for MATH 4023. Intended for prospective elementary and junior high school teachers; Mathematics and Computer Science majors will not receive credit for this course.

MATH 4014 - Algebra and Functions

Units: 4

Patterns and functional relationships. Linear and quadratic equations and inequalities. Interpretation of graphs, multiple representations of functions. Factoring and completing the square. Proportional reasoning. Systems of linear equations. *Prerequisites: MATH 2011 and satisfactory completion of the Entry Level Mathematics requirement.* Not open to students with credit for MATH 4024. Intended for prospective elementary and junior high school teachers; Mathematics and Computer Science majors will not receive credit for this course.

MATH 4030 - Advanced Study of School Mathematics

Units: 4

Foundations of school mathematics from an advanced standpoint. An in depth study of middle and high school level algebra, geometry and number theory and its applications, theoretical foundations and extensions. Intended for prospective elementary and middle school teachers. *Prerequisites: MATH 2011 and MATH 1130 or consent of instructor. A-F grading only.* Intended for prospective elementary and junior high school teachers; Mathematics and Computer Science majors will not receive credit for this course.

MATH 4040 - History of Mathematics

Units: 4

The historical development of mathematical ideas and techniques. *Prerequisites: Calculus or consent of instructor.*

MATH 4100 - Mathematical Logic

Units: 4

The propositional calculus and its completeness. Boolean algebras. Functional calculi of various orders. Theorems of Godel and Henkin. *Prerequisites: Senior standing in mathematics or consent of instructor.*

MATH 4121 - Advanced Algebra

Units: 4

Theory of groups, including factor groups, Jordan-Holder Theorem, Sylow theorems. Mappings and homomorphisms. Introduction to rings and fields. Topics continued in MATH 6121. May not be applied towards the Mathematics, M.S. degree. *Prerequisites: MATH 3122. May not earn credit for MATH 6119.*

MATH 4151 - Graph Theory

Units: 4

Introduction to graph theory. Graphic sequences. Planar graphs and the theorems of Euler and Kuratowski. Bipartite graphs. Connectivity and spanning trees. Hamiltonian graphs. Matching, chromatic and characteristic polynomials. Cospectral graphs and the graph isomorphism problem. Algorithms. *Prerequisites: MATH 2101 and either MATH 2150 or MATH 3000.*

MATH 4215 - Topics in Geometry

Units: 4

Topics in geometry such as algebraic, differential, finite, or projective geometry, convexity, packing and tiling, polytopes, and isoperimetric problems. *Prerequisites: MATH 3215 or consent of instructor.* May be repeated once for credit with consent of the chair, for a maximum of 8 units.

MATH 4235 - Introduction to Knot Theory

Units: 4

An introduction to the theory of knots and links. Topics covered include Reidemeister moves, knot invariants, including 3-colorings, the linking number, the Alexander polynomial, the Kauffman bracket and Jones polynomial. As time permits, some applications in biology and/or chemistry will be discussed. *Prerequisites: MATH 3121.*

MATH 4340 - Introduction to Complex Variables

Units: 4

Introduction to theory of functions of complex variables. May not be applied towards the Mathematics, M.S. degree.

Prerequisites: MATH 3300.

MATH 4350 - Theory of Functions of a Real Variable

Units: 4

Pointwise and uniform convergence, Taylor series, Riemann integration, sets of measure zero, Lebesgue's theorem on the Riemann integral, the metric space of continuous functions, and selected topics. May not be applied towards the Mathematics M.S. degree. Not open to students with credit for MATH 6349.

MATH 4360 - Introduction to Topology

Units: 4

Topological spaces, metric spaces, continuity, connectedness and compactness. *Prerequisites: MATH 3300.* May not be applied towards the Mathematics M.S. degree. Not open to students with credit for MATH 6200.

MATH 4361 - Partial Differential Equations

Units: 4

Differential equations of physics: the wave equation, the heat equation, Laplace's equation; boundary-value problems. Elementary Sturm-Liouville theory, Fourier series, Fourier and Laplace transforms, Bessel functions, selected topics.

Prerequisites: MATH 3331.

MATH 4365 - Dynamical Systems

Units: 4

Introduction to dynamical systems and applications. Variational calculus, Lagrangian dynamics, principle of critical action, Hamiltonian systems and symplectic mechanics, Hamilton-Jacobi equation, chaotic and nonlinear systems, fractals.

Prerequisites: MATH 3100, MATH 3300, MATH 3331, or consent of instructor.

MATH 4750 - Numerical Analysis II

Units: 4

Continuation of MATH 3750. Numerical solution of linear systems, matrix norms, approximation of functions, algebraic eigenvalues. *Prerequisites: MATH 3750/CS 3750.*

MATH 4841 - Topics in Optimization

Units: 4

Sequel to MATH 3841. Topics to be drawn from linear and/or nonlinear programming. Linear programming topics may include integer programming, game theory, network programming; nonlinear programming topics include optimality conditions and solution procedures for unconstrained and constrained optimization problems. *Prerequisites: MATH 3841.* May be repeated once for credit with consent of the chair, for a maximum of 8 units.

MATH 4842 - Advanced Topics in Optimization

Units: 4

Topics selected from quasi-Newton methods for multi-variable unconstrained optimization; nonlinear least squares; quadratic programming; constrained optimization with nonlinear constraints; convex optimization. *Prerequisites: MATH 3750 and MATH*

3841 or permission of instructor. May be repeated once for credit, with consent of the Mathematics Graduate Studies Committee, for a maximum of 8 units.

MATH 4845 - Fuzzy Sets and Fuzzy Logic

Units: 4

(See CS 4845 for course description.)

MATH 4900 - Independent Study

Units: 1-5

May be repeated for credit with consent of instructor, for a maximum of 12 units.

MATH 4901 - Senior Seminar

Units: 4

Exploration of topics in mathematics. Topics selected from the literature to illustrate relationships among various areas of mathematics. Oral presentations and paper required. *Prerequisites: Senior standing in mathematics (completion of 32 units of mathematics courses) or permission of the instructor.*

Mathematics: Developmental

MATH 800 - Introduction to Algebra

Units: 4

Fractions, signed numbers, percentages, introduction to geometry, simplifying algebraic expressions, solving linear equations, straight lines. *Prerequisites: Appropriate ELM score (ranges available from the Testing Office or at <http://www.csueastbay.edu/ge/remedialinfo/scores.htm>). Not for credit toward baccalaureate degree. A/B/C/NC grading only.*

MATH 805 - Beginning Algebra

Units: 4

Signed numbers, fractions, decimals, percentages, simplifying algebraic expressions, solving linear equations, straight lines, introduction to geometry. *Prerequisites: Appropriate ELM score (ranges available from the Testing Office or at <http://www20.csueastbay.edu/ge/remedial/score.html>). Not for credit towards baccalaureate degree. ABC/NC grading only.*

MATH 900 - Elementary Algebra

Units: 4

A one quarter course in elementary algebra. On successful completion of this course, students should register for MATH 950. *Prerequisites: Grade of A/B/C in MATH 800 or appropriate ELM score (ranges available from the Testing Office or at <http://www.csueastbay.edu/ge/remedialinfo/scores.htm>). Not for credit toward baccalaureate degree. A/B/C/NC grading only.* Completion of MATH 0900 does not satisfy the ELM requirement. Students must also pass MATH 950 before enrolling in a baccalaureate-level mathematics course.

MATH 911 - Algebra Lab

Units: 2

Supplemental study, discussion, and practice in the theory, problems, and applications of elementary and intermediate algebra.

Co-requisites: Enrollment in MATH 900, or MATH 950. May be repeated once for credit (nonbaccalaureate), with permission of the Math/CS Department, for a maximum of 4 units. Not for credit toward baccalaureate degree. A/B/C/NC grading only.

MATH 950 - Intermediate Algebra

Units: 4

Operations with algebraic expressions, exponents and radicals; linear and quadratic equations; systems of equations and inequalities; linear and quadratic functions and their graphs; elementary conic sections; word problems. *Prerequisites: Grade of A/B/C in MATH 900; or an appropriate ELM score (ranges available from the Testing Office or at <http://www.csueastbay.edu/ge/remedialinfo/scores.htm>). Not for credit toward baccalaureate degree. A/B/C/NC grading only.*

Mathematics: Education: Graduate

MATH 6015 - Algebra for Teachers

Units: 4

Polynomials, groups, fields, and rings from an advanced standpoint as they relate to the high school algebra curriculum. Discussion of strategies to help secondary students develop their algebraic thinking skills. *Prerequisites: Permission of instructor.*

MATH 6025 - Geometry for Teachers

Units: 4

Rigorous development of a non-Euclidean geometry, such as spherical, projective, or hyperbolic geometry. Models and technology used where appropriate. Discussion of implementation strategies for teaching geometry and proof techniques for high school students. *Prerequisites: Permission of instructor.*

MATH 6035 - Analysis for Teachers

Units: 4

A rigorous development of calculus. The real line, functions, limits, continuity, differential and integral calculus. Technology used to develop an intuitive understanding of calculus which can be implemented in the high school classroom. *Prerequisites: Permission of instructor.*

MATH 6045 - Mathematics in the Sciences

Units: 4

Mathematics as found throughout the sciences. The mathematics used to model phenomena in biology, chemistry and/or physics. Students discover some of this mathematics through scientific experiments. *Prerequisites: Permission of instructor.*

MATH 6055 - Discrete Mathematics

Units: 4

Topics in discrete mathematics relating to the high school curriculum such as combinatorics, number theory, and graph theory. *Prerequisites: Permission of instructor.*

MATH 6065 - Connections in Mathematics

Units: 4

Topics which illustrate connections between different fields and applications of mathematics such as neural networks, tomography, coding theory, symmetry groups, optimization theory, and applications found in differential equations or complex analysis. *Prerequisites: Permission of instructor.*

MATH 6899 - Project

Units: 1-5

Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense may be required. *Prerequisites: Graduate status. Maximum of 5 units per student.*

MATH 6900 - Independent Study

Units: 1-4

Mathematics: Graduate

MATH 6000 - Advanced Topics via a Research Paper

Units: 4

Introduction to the skills involved and the topics required in reading a mathematical research paper, chosen by the instructor. *Prerequisites: At least 16 units of 3000-level, or higher, mathematics courses, or instructor permission.* May be repeated twice for credit with consent of department and when content varies, for a maximum of 8 units.

MATH 6005 - Teaching Mathematics at the University Level

Units: 1

Theory, methodology, and practical experience in the teaching of mathematics at the university level. Includes discussion of lecturing techniques, analysis of tests and supporting material, preparation and grading of examinations, and related topics. Required of departmental teaching associates. *Prerequisites: Graduate standing and permission of department.* May be repeated for credit, but only two units can be used toward the M.S. degree.

MATH 6100 - Applied Algebra

Units: 4

A survey course covering significant areas of applied algebra. Topics might include applied matrix theory, game theory, convexity and inequalities, and/or algebraic coding theory. *Prerequisites: MATH 3100 or equivalent.* May be repeated once for credit with consent of Mathematics Graduate Studies Committee, for a maximum of 8 units.

MATH 6119 - Advanced Algebra

Units: 4

Theory of groups, including factor groups, Jordan-Holder Theorem, Sylow theorems. Mappings and homomorphisms. Introduction to rings and fields. Students will do independent theoretical work. Topics continued in MATH 6121. *Prerequisites: MATH 3122.* Not open to students with credit for MATH 4121.

MATH 6121 - Topics in Advanced Algebra I

Units: 4

Continuation of MATH 4121. Topics include ideals, commutative rings, modules; field extensions and Galois theory.
Prerequisites: MATH 4121.

MATH 6125 - Introduction to Lie Algebras

Units: 4

An introduction to the theory of semisimple Lie algebras. Theorems of Lie, Engel, and Weyl; Cartan's Criterion; the classification of root systems; and abstract theory of weights. *Prerequisites: MATH 3100 or consent of instructor.*

MATH 6151 - Advanced Topics in Graph Theory

Units: 4

Advanced course in graph theory. Connectivity, planarity, and graph coloring. Advanced topics which may include substructures in graphs and Ramsey Theory, Random Graphs, Spectral Graph Theory. *Prerequisites: MATH 3100 and graduate standing.* May be repeated once for credit with consent of instructor and when content varies, for a maximum of 8 units. *A-F grading only.*

MATH 6200 - Introduction to Topology

Units: 4

Topological spaces, metric spaces, continuity, connectedness and compactness. Independent theoretical work. *Prerequisites: MATH 3300.* Not open to students with credit for MATH 4360. *A-F grading only.* Dual-listing: MATH 4360.

MATH 6201 - Topology

Units: 4

Continuation of MATH 4360/MATH 6200. Topics may include countability and separation axioms, Tychonoff theorem, metrization theorems, homotopy theory. *Prerequisites: MATH 4360/MATH 6200.*

MATH 6210 - Convex Polytopes/Combinatorial Geometry

Units: 4

Convex sets including convex hulls, supporting hyperplanes and duality. Convex polytopes, including simple, simplicial, and cyclic polytopes. Combinatorial theory, including Euler's Relations, Dehn-Somerville Relations and Upper Bound Theorem. *Prerequisites: MATH 3100 and MATH 3300 or consent of instructor.*

MATH 6235 - Introduction to Knot Theory

Units: 4

Introduction to the theory of knots and links. Reidemeister moves, knot invariants, including 3-colorings, linking number, Alexander polynomial, Kauffman bracket and Jones polynomial. Applications in biology and/or chemistry will be discussed, time permitting. Additional work required for graduate level credit. *Prerequisites: MATH 3121.*

MATH 6250 - Topics in Differential Geometry and Topology

Units: 4

Topics in differential geometry and topology such as manifolds, bundles, differential forms, curvature, theorems of Sard-Smale, Poincaré-Hopf, Gauss-Bonnet, de Rham, and Hodge. *Prerequisites: MATH 3100, MATH 3301, or consent of instructor.*

MATH 6251 - Symplectic Geometry

Units: 4

Introduction to Symplectic Geometry. Symplectic linear algebra, groups, Lie algebras, and manifolds. Darboux-Weinstein theorem, relation to optics and Hamiltonian dynamics, moment maps, and geometric quantization. *Prerequisites: MATH 3100 and MATH 3300, or consent of instructor. A-F grading only.*

MATH 6260 - Computation and Complexity

Units: 4

(See CS 6260 for course description.)

MATH 6331 - Topics in Differential Equations

Units: 4

Topics selected from the theory of ordinary and partial differential equations. *Prerequisites: MATH 3100, MATH 3331, MATH 3301, or instructor's permission.* May be repeated two times for credit with consent of Mathematics Graduate Studies Committee and when content varies, for a maximum of 12 units.

MATH 6339 - Introduction to Complex Variables

Units: 4

Introduction to theory of functions of complex variables. Advanced synthesis of theory and practice. *Prerequisites: MATH 3300.* Not open to students with credit for MATH 4340.

MATH 6340 - Complex Analysis

Units: 4

Cauchy integral formula, Mittag-Leffler's theorem, Weierstrass' factorization theorem, normal families, Riemann mapping theorem, and selected topics. *Prerequisites: MATH 4340.*

MATH 6349 - Theory of Functions of a Real Variable

Units: 4

Pointwise and uniform convergence. Taylor series, Riemann integration, sets of measure zero, Lebesgue's theorem on the Riemann integral, the metric space of continuous functions, and selected topics. Students will do independent theoretical work. *Prerequisites: MATH 3300.* Not open to students with credit for MATH 4350. Dual-listed: MATH 4350.

MATH 6350 - Real Analysis

Units: 4

Theory of Lebesgue measure and integration on the real line. Selected topics and applications. *Prerequisites: MATH 4350 or MATH 6349.*

MATH 6401 - Advanced Probability I

Units: 4

(See STAT 6401 for course description.)

MATH 6501 - Mathematical Statistics I

Units: 4

(See STAT 6501, STAT 6502 for course description.)

MATH 6502 - Mathematical Statistics II

Units: 4

(See STAT 6501, STAT 6502 for course description.)

MATH 6600 - Advanced Number Theory

Units: 4

Topics in number theory such as algebraic number fields, continued fractions, geometry of numbers, theory of partitions, distribution of primes, factoring algorithms and quadratic forms. *Prerequisites: MATH 3121 and MATH 3600 or consent of instructor.* May be repeated once for credit with consent of the Mathematics/Computer Science department chair, for a maximum of 8 units.

MATH 6750 - Topics in Advanced Numerical Analysis

Units: 4

Topics selected from approximation theory; spline theory; numerical linear algebra; the algebraic eigenvalue problem; numerical solutions to non-linear systems of equations, partial differential equations, and boundary value problems. *Prerequisites: MATH 4750 and MATH 3301 or instructor's permission.* May be repeated two times for credit with consent of Mathematics Graduate Studies Committee and when content varies, for a maximum of 12 units. Cross-listed CS 6750.

MATH 6840 - Advanced Topics in Linear Optimization

Units: 4

Topics selected from network algorithms, integer programming, game theory, and other areas related to linear programming. *Prerequisites: MATH 3841.* May be repeated once for credit with consent of Mathematics Graduate Studies Committee, for a maximum of 8 units. *A-F grading only.*

MATH 6841 - Nonlinear Optimization

Units: 4

Optimality conditions and solution procedures for unconstrained and constrained optimization problems. *Prerequisites: MATH 3841.*

MATH 6842 - Advanced Topics in Optimization

Units: 4

Topics selected from quasi-Newton methods for multi-variable unconstrained optimization; nonlinear least squares; quadratic programming; constrained optimization with nonlinear constraints; convex optimization. *Prerequisites: MATH 3750 and MATH 3841, or permission of instructor.* May be repeated once for credit with consent of Mathematics Graduate Studies Committee, for a maximum of 8 units.

MATH 6865 - Mathematical Modeling

Units: 4

Discrete and continuous mathematical models. General introduction to the use of difference and differential equations, probability and statistics, and matrices for solving realistic problems. Computer simulation. Emphasis on effective written

reports. Additional graduate applications module. *Prerequisites: MATH 2101 and MATH 2304.* Cross-listed STAT 6865. Not open to students with credit for MATH 3865.

MATH 6870 - Computer Simulation

Units: 4

(See CS 6870 for course description.)

MATH 6875 - Topics in Mathematical Physics

Units: 4

Advanced mathematics theory and methods with applications to physics. *Prerequisites: MATH 1305. Co-requisites: MATH 2304.* May be repeated for credit when content varies, for a maximum of 8 units.

MATH 6900 - Independent Study

Units: 1-4

MATH 6910 - University Thesis

Units: 1-6

Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See also, "University Thesis Writing Guide," www.csueastbay.edu/thesiswritingguide.) *Prerequisites: Graduate standing. Maximum of 6 units per student.*

MATH 6935 - Mathematical Logic

Units: 4

Content of MATH 4100 with a Graduate Module. Propositional calculus and its completeness. Boolean algebras. Functional calculi of various orders. Theorems of Godel and Henkin. *Prerequisites: Graduate standing.* Not open to students with credit for MATH 4100. *A-F grading only.*

Modern Languages and Literatures: Spanish-American Literature and Culture

MLL 3461 - Introduction to Spanish-American Literature: 1492 to 1900

Units: 4

Philosophical, religious, political, artistic, and literary elements examined in Latin American literature. Survey begins with the analysis of pre-Colombian texts and moves through the centuries; colonial literature, romanticism, realism, and modernism discussed. *Prerequisites: MLL 2403 or consent of instructor.*

MLL 3463 - Introduction to Spanish-American Literature: 1900 to the Present

Units: 4

Philosophical, religious, political, artistic, and literary elements examined in contemporary Latin American literature. Prose, poetry and drama of the 20th Century. Continuation of MLL 3461. *Prerequisites: MLL 2403 or consent of instructor.*

MLL 3495 - Spanish-American Culture and Civilization

Units: 4

A study of Spanish American culture and civilization through its history, arts, and social institutions. *Prerequisites: MLL 2403 or consent of instructor.*

MLL 4495 - A Single Movement, Country or Theme: Spanish American Literature

Units: 4

Single author, country, movement or theme in Spanish-American Literature. *Prerequisites: MLL 2403 or consent of instructor.* May be repeated three times for credit when content varies, for a maximum of 16 units.

Modern Languages and Literatures

MLL 1005 - Viewing Diversity

Units: 4

Provides understanding of the interrelationship of the world community and concentration on the question of identity in the context of hybrid cultures, with specific emphasis on colonialism and post-colonialism in the Francophone world and Latin America.

MLL 1831 - Introduction to Asian Thought

Units: 4

The thought of China and Japan, past and present, as expressed in literature. (In English)

MLL 3001 - World Languages in an International Context

Units: 4

On campus and international travel experience in a selected language and culture; language may vary annually. Schedule will specify which language is eligible for enrollment. *Prerequisites: Advisor approval; two years of study in the selected language or consent of instructor.* May be repeated once for credit, for a maximum of 8 units to be used toward the certificate.

MLL 3119 - French Literature in English Translation

Units: 4

An interdisciplinary study of major authors and movements in French literature, emphasizing literary, philosophical, historical and cultural backgrounds. *Prerequisites: Junior standing; either C- (CR) or better in ENGL 3000 or ENGL 3001, or score of 7 or better on the Writing Skills Test, or satisfaction of the graduation writing assessment requirement (GWAR) at any CSU campus including the UWSR at the Hayward Hills campus.* May be repeated once for credit when content varies, for a maximum of 8 units.

MLL 3240 - German Film: from Metropolis to Present German Cinema (in English)

Units: 4

(See description under German courses.)

MLL 3612 - Modern Chinese Short Stories (in English)

Units: 4

(See description under Chinese courses.)

MLL 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least 2.0 GPA; departmental approval of activity.* May be repeated for credit, for a maximum of 8 units. A maximum of 4 units credit will be accepted toward the majors and minors offered by Modern Languages. *CR/NC grading only.*

MLL 3938 - Italian American Women Through Literature (in English)

Units: 4

(See description under Italian courses.)

MLL 3999 - Issues in Modern Languages and Literatures

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in modern languages and literatures. May be repeated for credit when content varies, for a maximum of 8 units.

MLL 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

MLL 5900 - Independent Study

Units: 1-4

MLL 6900 - Independent Study

Units: 1-4

Modern Languages and Literatures: Chinese

MLL 1601 - Elementary Mandarin Chinese I

Units: 4

Introduction to the speaking, understanding, reading, and writing Mandarin Chinese. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. *Prerequisites: MLL 1601 is prerequisite to MLL 1602, or consent of instructor; MLL 1602 is prerequisite to MLL 1603, or consent of instructor.*

MLL 1602 - Elementary Mandarin Chinese II

Units: 4

Introduction to the speaking, understanding, reading, and writing Mandarin Chinese. A communicative approach to the

acquisition of the language with emphasis on the appreciation of the culture. *Prerequisites: MLL 1601 is prerequisite to MLL 1602, or consent of instructor; MLL 1602 is prerequisite to MLL 1603, or consent of instructor.*

MLL 1603 - Elementary Mandarin Chinese III

Units: 4

Introduction to the speaking, understanding, reading, and writing Mandarin Chinese. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. *Prerequisites: MLL 1601 is prerequisite to MLL 1602, or consent of instructor; MLL 1602 is prerequisite to MLL 1603, or consent of instructor.*

MLL 1611 - Intensive Elementary Chinese

Units: 4

Designed for students with conversational background in Mandarin Chinese, Cantonese, Taiwanese or other Chinese dialects that require instruction in the Pinyin romanization system, in writing Chinese characters, and synthesizing Chinese grammar. Not open to students who are currently enrolled in, or have credit for MLL 1601-MLL 1602-MLL 1603.

MLL 2601 - Intermediate Mandarin Chinese I

Units: 4

A continuation of MLL 1603 with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of Chinese culture. *Prerequisites: MLL 2601 is prerequisite to MLL 2602, or consent of instructor; MLL 2602 is prerequisite to MLL 2603, or consent of instructor.*

MLL 2602 - Intermediate Mandarin Chinese II

Units: 4

A continuation of MLL 1603 with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of Chinese culture. *Prerequisites: MLL 2601 is prerequisite to MLL 2602, or consent of instructor; MLL 2602 is prerequisite to MLL 2603, or consent of instructor.*

MLL 2603 - Intermediate Mandarin Chinese III

Units: 4

A continuation of MLL 1603 with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of Chinese culture. *Prerequisites: MLL 2601 is prerequisite to MLL 2602, or consent of instructor; MLL 2602 is prerequisite to MLL 2603, or consent of instructor.*

MLL 3601 - Advanced Reading, Composition and Translation

Units: 4

Advanced development of reading, writing, and translation skills through reading news about China, online or in print. Discussion of grammar and syntax in text and related topical social issues. *Prerequisites: MLL 2603 or consent of instructor*

MLL 3602 - Modern Chinese Literature, Linguistics and Culture

Units: 4

Survey of the masterpieces of modern vernacular Chinese literature of the post-1919 era. Focus on the readings of prose, fiction and verse in vernacular styles; discussion of philological, linguistic and cultural issues. *Prerequisites: MLL 2603 or consent of instructor*

MLL 3603 - Classical Chinese Literature, Rhetoric and Culture

Units: 4

Survey of the masterpieces of classical Chinese literature of the pre-modern era. Focus on the readings of literary classical verse and prose; discussion of Chinese philosophy, metaphor, rhetoric and history. *Prerequisites: MLL 2603 or consent of instructor.*

MLL 3611 - New Chinese Cinema

Units: 4

An interdisciplinary study of new Chinese cinema filmmakers and cultural movements of greater China (including mainland China, Taiwan, Hong Kong) since the emergence of new cinematic movements of the 80's to the present.

MLL 3612 - Modern Chinese Short Stories

Units: 4

Short stories and feature films about Modern China from ante-Republic era to present. Stories by prominent writers portray controversial images of Chinese women, either as wilting flowers or powerful dragon-ladies. Cultural and gender issues observed from various perspectives. May be repeated once for credit when content varies, for a maximum of 8 units.

Modern Languages and Literatures: Dari

MLL 1561 - Elementary Dari I

Units: 4

Introduction to speaking, understanding, reading, and writing Dari, one of two official languages of Afghanistan. Dari is the Afghan variety of the Persian Language, Farsi. *Prerequisites: MLL 1561 is prerequisite to MLL 1562, or consent of instructor; MLL 1562 is prerequisite to MLL 1563, or consent of instructor.*

MLL 1562 - Elementary Dari II

Units: 4

Introduction to speaking, understanding, reading, and writing Dari, one of two official languages of Afghanistan. Dari is the Afghan variety of the Persian Language, Farsi. *Prerequisites: MLL 1561 is prerequisite to MLL 1562, or consent of instructor; MLL 1562 is prerequisite to MLL 1563, or consent of instructor.*

MLL 1563 - Elementary Dari III

Units: 4

Introduction to speaking, understanding, reading, and writing Dari, one of two official languages of Afghanistan. Dari is the Afghan variety of the Persian Language, Farsi. *Prerequisites: MLL 1561 is prerequisite to MLL 1562, or consent of instructor; MLL 1562 is prerequisite to MLL 1563, or consent of instructor.*

MLL 2561 - Intermediate Dari I

Units: 4

A continuation of MLL 1563, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of Afghan culture. *Prerequisites: MLL 2561 is prerequisite to MLL 2562, or consent of instructor; MLL 2562 is prerequisite to MLL 2563, or consent of instructor.*

MLL 2562 - Intermediate Dari II

Units: 4

A continuation of MLL 1563, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of Afghan culture. *Prerequisites: MLL 2561 is prerequisite to MLL 2562, or consent of instructor; MLL 2562 is prerequisite to MLL 2563, or consent of instructor.*

MLL 2563 - Intermediate Dari III

Units: 4

A continuation of MLL 1563, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of Afghan culture. *Prerequisites: MLL 2561 is prerequisite to MLL 2562, or consent of instructor; MLL 2562 is prerequisite to MLL 2563, or consent of instructor.*

Modern Languages and Literatures: Filipino

MLL 1651 - Elementary Filipino I

Units: 4

Introduction to speaking, reading, and writing and understanding Filipino. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. *Prerequisites: MLL 1651 is prerequisite to MLL 1652, or consent of instructor; MLL 1652 is prerequisite to MLL 1653, or consent of instructor.*

MLL 1652 - Elementary Filipino II

Units: 4

Introduction to speaking, reading, and writing and understanding Filipino. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. *Prerequisites: MLL 1651 is prerequisite to MLL 1652, or consent of instructor; MLL 1652 is prerequisite to MLL 1653, or consent of instructor.*

MLL 1653 - Elementary Filipino III

Units: 4

Introduction to speaking, reading, and writing and understanding Filipino. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. *Prerequisites: MLL 1651 is prerequisite to MLL 1652, or consent of instructor; MLL 1652 is prerequisite to MLL 1653, or consent of instructor.*

MLL 2652 - Intermediate Filipino II

Units: 4

A continuation of MLL 1653 with increased emphasis on the structure of the language, on vocabulary building, on conversation, and on the appreciation of Filipino culture; *Prerequisites: MLL 2652 is prerequisite to MLL 2653, or consent of instructor.*

MLL 2653 - Intermediate Filipino III

Units: 4

A continuation of MLL 1653 with increased emphasis on the structure of the language, on vocabulary building, on conversation, and on the appreciation of Filipino culture; *Prerequisites: MLL 2652 is prerequisite to MLL 2653, or consent of instructor.*

Modern Languages and Literatures: French

MLL 1101 - Elementary French I

Units: 4

Introduction to speaking, understanding, reading, and writing French. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. *Prerequisites: MLL 1101 is prerequisite to MLL 1102, or consent of instructor; MLL 1102 is prerequisite to MLL 1103, or consent of instructor.*

MLL 1102 - Elementary French II

Units: 4

Introduction to speaking, understanding, reading, and writing French. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. *Prerequisites: MLL 1101 is prerequisite to MLL 1102, or consent of instructor; MLL 1102 is prerequisite to MLL 1103, or consent of instructor.*

MLL 1103 - Elementary French III

Units: 4

Introduction to speaking, understanding, reading, and writing French. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. *Prerequisites: MLL 1101 is prerequisite to MLL 1102, or consent of instructor; MLL 1102 is prerequisite to MLL 1103, or consent of instructor.*

MLL 2101 - Intermediate French I

Units: 4

A continuation of MLL 1103, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of the cultures of the French-speaking world. *Prerequisites: MLL 2101 is prerequisite to MLL 2102, or consent of instructor; MLL 2102 is prerequisite to MLL 2103, or consent of instructor.*

MLL 2102 - Intermediate French II

Units: 4

A continuation of MLL 1103, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of the cultures of the French-speaking world. *Prerequisites: MLL 2101 is prerequisite to MLL 2102, or consent of instructor; MLL 2102 is prerequisite to MLL 2103, or consent of instructor.*

MLL 2103 - Intermediate French III

Units: 4

A continuation of MLL 1103, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of the cultures of the French-speaking world. *Prerequisites: MLL 2101 is prerequisite to MLL 2102, or consent of instructor; MLL 2102 is prerequisite to MLL 2103, or consent of instructor.*

MLL 2110 - French Conversation

Units: 4

Emphasis on the spoken language studied through texts. Strongly recommended for majors. *Prerequisites: MLL 2103 or consent of instructor.*

MLL 3101 - Cinema for French Composition

Units: 4

Use of French and Francophone films as a basis for classroom discussion and for instruction in language proficiencies in listening, speaking, reading, and writing in various contexts and situations. French/Francophone life, language and culture through the writing of essays.

MLL 3102 - Cinema for Advanced French Composition

Units: 4

Use of French and Francophone films as a basis for classroom discussion and for instruction in language proficiencies in listening, speaking, reading, and writing in various contexts and situations. Writing of essays at an advanced level.

MLL 3130 - Francophone Culture and Civilization through Cinema

Units: 4

A study of French culture through French and Francophone films illustrating artistic, political, social, and philosophical schools, to offer a better understanding of a variety of cultures from Francophone countries around the world and analysis of cultural differences. *Prerequisites: MLL 2103 or consent of instructor.* May be repeated once for credit when content varies, for a maximum of 8 units.

MLL 4100 - French Literary Themes and Figures

Units: 4

A study of selected themes and figures in French literature emphasizing an author, genre, or movement. *Prerequisites: Consent of instructor.* May be repeated once for credit when content varies, for a maximum of 8 units.

MLL 4110 - Francophone Rap/Hip-Hop

Units: 4

Examination of the success of rap and hip hop as outlets to express the social concerns of the various ethnicities of the Francophone world. Concentration on socio-cultural and literary perspectives. May be repeated for credit when content varies. May be repeated once for credit when content varies, for a maximum of 8 units.

Modern Languages and Literatures: German

MLL 1201 - Elementary German I

Units: 4

Introduction to speaking, understanding, reading, and writing German. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. *Prerequisites: MLL 1201 is prerequisite to MLL 1202, or consent of instructor; MLL 1202 is prerequisite to MLL 1203, or consent of instructor.*

MLL 1202 - Elementary German II

Units: 4

Introduction to speaking, understanding, reading, and writing German. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. *Prerequisites: MLL 1201 is prerequisite to MLL 1202, or consent of instructor; MLL 1202 is prerequisite to MLL 1203, or consent of instructor.*

MLL 1203 - Elementary German III

Units: 4

Introduction to speaking, understanding, reading, and writing German. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. *Prerequisites: MLL 1201 is prerequisite to MLL 1202, or consent of instructor; MLL 1202 is prerequisite to MLL 1203, or consent of instructor.*

MLL 3240 - German Film: from Metropolis to Present German Cinema

Units: 4

Representative films from German cinema illustrating the artistic use of film during Expressionism, its propagandistic use during the Third Reich, recent films as fictional representation of the quest for German identity. May be repeated once for credit when content varies, for a maximum of 8 units.

Modern Languages and Literatures: Italian

MLL 1301 - Italian Culture and Language I

Units: 4

Multimedia approach to speaking, understanding, reading, and writing Italian within the context of Italian culture throughout history. *Prerequisites: MLL 1301 is prerequisite to MLL 1302; MLL 1302 is prerequisite to MLL 1303; or consent of instructor.*

MLL 1302 - Italian Culture and Language II

Units: 4

Multimedia approach to speaking, understanding, reading, and writing Italian within the context of Italian culture throughout history. *Prerequisites: MLL 1301 is prerequisite to MLL 1302; MLL 1302 is prerequisite to MLL 1303; or consent of instructor.*

MLL 1303 - Italian Culture and Language III

Units: 4

Multimedia approach to speaking, understanding, reading, and writing Italian within the context of Italian culture throughout history. *Prerequisites: MLL 1301 is prerequisite to MLL 1302; MLL 1302 is prerequisite to MLL 1303; or consent of instructor.*

Modern Languages and Literatures: Japanese

MLL 1801 - Elementary Japanese I

Units: 4

Introduction to speaking, understanding, reading, and writing Japanese. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. *Prerequisites: MLL 1801 is prerequisite to MLL 1802, or consent of instructor; MLL 1802 is prerequisite to MLL 1803, or consent of instructor.*

MLL 1802 - Elementary Japanese II

Units: 4

Introduction to speaking, understanding, reading, and writing Japanese. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. *Prerequisites: MLL 1801 is prerequisite to MLL 1802, or consent of instructor; MLL 1802 is prerequisite to MLL 1803, or consent of instructor.*

MLL 1803 - Elementary Japanese III

Units: 4

Introduction to speaking, understanding, reading, and writing Japanese. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. *Prerequisites: MLL 1801 is prerequisite to MLL 1802, or consent of instructor; MLL 1802 is prerequisite to MLL 1803, or consent of instructor.*

MLL 2801 - Intermediate Japanese I

Units: 4

A continuation of MLL 1803, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of Japanese culture.

MLL 2802 - Intermediate Japanese II

Units: 4

A continuation of MLL 1803, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of Japanese culture.

MLL 2803 - Intermediate Japanese III

Units: 4

A continuation of MLL 1803, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of Japanese culture.

MLL 3812 - Modern Japanese Short Stories in English Translation

Units: 4

Short stories in English of Modern Japan from 1868 Meiji Restoration to present. Prominent writers portray controversial images of Japan; imperialist, war defeated yet transformed into economic superpower; 'lost decade' while assessing bubble burst; and current trans-reality generation. *Repeatable for a maximum of 12 units.* Satisfies GE Area: C4.

Modern Languages and Literatures: Pashto

MLL 1551 - Elementary Pashto I

Units: 4

Introduction to speaking, understanding, reading, and writing Pashto, one of two official languages of Afghanistan. *Prerequisites: MLL 1551 is prerequisite to MLL 1552, or consent of instructor; MLL 1552 is prerequisite to MLL 1553, or consent of instructor.*

MLL 1552 - Elementary Pashto II

Units: 4

Introduction to speaking, understanding, reading, and writing Pashto, one of two official languages of Afghanistan. *Prerequisites: MLL 1551 is prerequisite to MLL 1552, or consent of instructor; MLL 1552 is prerequisite to MLL 1553, or consent of instructor.*

MLL 1553 - Elementary Pashto III

Units: 4

Introduction to speaking, understanding, reading, and writing Pashto, one of two official languages of Afghanistan. *Prerequisites: MLL 1551 is prerequisite to MLL 1552, or consent of instructor; MLL 1552 is prerequisite to MLL 1553, or consent of instructor.*

MLL 2551 - Intermediate Pashto I

Units: 4

A continuation of MLL 1563, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of Afghan culture. *Prerequisites: MLL 2551 is prerequisite to MLL 2552, or consent of instructor; MLL 2552 is prerequisite to MLL 2553, or consent of instructor.*

MLL 2552 - Intermediate Pashto II

Units: 4

A continuation of MLL 1563, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of Afghan culture. *Prerequisites: MLL 2551 is prerequisite to MLL 2552, or consent of instructor; MLL 2552 is prerequisite to MLL 2553, or consent of instructor.*

MLL 2553 - Intermediate Pashto III

Units: 4

A continuation of MLL 1563, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of Afghan culture. *Prerequisites: MLL 2551 is prerequisite to MLL 2552, or consent of instructor; MLL 2552 is prerequisite to MLL 2553, or consent of instructor.*

Modern Languages and Literatures: Persian

MLL 1951 - Elementary Persian I

Units: 4

Introduction to speaking, understanding, reading and writing Persian (Farsi). A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture, history, religion and geography of the Persian-speaking world. *Prerequisites: MLL 1951 is prerequisite to MLL 1952, or consent of instructor; MLL 1952 is prerequisite to MLL 1953, or consent of instructor.*

MLL 1952 - Elementary Persian II

Units: 4

Introduction to speaking, understanding, reading and writing Persian (Farsi). A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture, history, religion and geography of the Persian-speaking world. *Prerequisites: MLL 1951 is prerequisite to MLL 1952, or consent of instructor; MLL 1952 is prerequisite to MLL 1953, or consent of instructor.*

MLL 1953 - Elementary Persian III

Units: 4

Introduction to speaking, understanding, reading and writing Persian (Farsi). A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture, history, religion and geography of the Persian-speaking world.

Prerequisites: MLL 1951 is prerequisite to MLL 1952, or consent of instructor; MLL 1952 is prerequisite to MLL 1953, or consent of instructor.

MLL 2951 - Intermediate Persian I

Units: 4

An approach to speaking, understanding, reading and writing Persian (Farsi) at the intermediate level. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture, history, religion and geography of the Persian-speaking world. *Prerequisites: MLL 1953, or consent of instructor, is prerequisite to MLL 2951; MLL 2951 is prerequisite to MLL 2952, or consent of instructor; MLL 2952 is prerequisite to MLL 2953, or consent of instructor.*

MLL 2952 - Intermediate Persian II

Units: 4

An approach to speaking, understanding, reading and writing Persian (Farsi) at the intermediate level. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture, history, religion and geography of the Persian-speaking world. *Prerequisites: MLL 1953, or consent of instructor, is prerequisite to MLL 2951; MLL 2951 is prerequisite to MLL 2952, or consent of instructor; MLL 2952 is prerequisite to MLL 2953, or consent of instructor.*

MLL 2953 - Intermediate Persian III

Units: 4

An approach to speaking, understanding, reading and writing Persian (Farsi) at the intermediate level. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture, history, religion and geography of the Persian-speaking world. *Prerequisites: MLL 1953, or consent of instructor, is prerequisite to MLL 2951; MLL 2951 is prerequisite to MLL 2952, or consent of instructor; MLL 2952 is prerequisite to MLL 2953, or consent of instructor.*

Modern Languages and Literatures: Portuguese

MLL 1851 - Elementary Portuguese I

Units: 4

Introduction to speaking, understanding, reading, and writing Portuguese. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. *Prerequisites: MLL 1851 is prerequisite to MLL 1852, or consent of instructor; MLL 1852 is prerequisite to MLL 1853, or consent of instructor.*

MLL 1852 - Elementary Portuguese II

Units: 4

Introduction to speaking, understanding, reading, and writing Portuguese. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. *Prerequisites: MLL 1851 is prerequisite to MLL 1852, or consent of instructor; MLL 1852 is prerequisite to MLL 1853, or consent of instructor.*

MLL 1853 - Elementary Portuguese III

Units: 4

Introduction to speaking, understanding, reading, and writing Portuguese. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. *Prerequisites: MLL 1851 is prerequisite to MLL 1852, or consent of instructor; MLL 1852 is prerequisite to MLL 1853, or consent of instructor.*

MLL 2851 - Intermediate Portuguese I

Units: 4

A continuation of MLL 1853, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of the cultures of the Portuguese-speaking world. *Prerequisites: MLL 2851 is prerequisite to MLL 2852, or consent of instructor; MLL 2852 is prerequisite to MLL 2853, or consent of instructor.*

MLL 2852 - Intermediate Portuguese II

Units: 4

A continuation of MLL 1853, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of the cultures of the Portuguese-speaking world. *Prerequisites: MLL 2851 is prerequisite to MLL 2852, or consent of instructor; MLL 2852 is prerequisite to MLL 2853, or consent of instructor.*

MLL 2853 - Intermediate Portuguese III

Units: 4

A continuation of MLL 1853, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of the cultures of the Portuguese-speaking world. *Prerequisites: MLL 2851 is prerequisite to MLL 2852, or consent of instructor; MLL 2852 is prerequisite to MLL 2853, or consent of instructor.*

MLL 3851 - Portuguese Grammar and Composition

Units: 4

Advanced grammar and structure applied to composition in the language. *Prerequisites: MLL 2853 or consent of instructor.*

MLL 3861 - Topics in Portuguese Literature

Units: 4

A variable subject course dealing with a particular aspect of Portuguese literature. *Prerequisites: MLL 2853 or consent of instructor.* May be repeated once for credit when content varies, for a maximum of 8 units.

MLL 3871 - Topics in Brazilian Literature

Units: 4

A variable subject course dealing with a particular aspect of Brazilian literature. *Prerequisites: MLL 2853 or consent of instructor.* May be repeated once for credit when content varies, for a maximum of 8 units.

Modern Languages and Literatures: Russian

MLL 1501 - Elementary Russian I

Units: 4

Introduction to speaking, understanding, reading, and writing Russian. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. *Prerequisites: MLL 1501 is prerequisite to MLL 1502, or consent of instructor; MLL 1502 is prerequisite to MLL 1503, or consent of instructor.*

MLL 1502 - Elementary Russian II

Units: 4

Introduction to speaking, understanding, reading, and writing Russian. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. *Prerequisites: MLL 1501 is prerequisite to MLL 1502, or consent of instructor; MLL 1502 is prerequisite to MLL 1503, or consent of instructor.*

MLL 1503 - Elementary Russian III

Units: 4

Introduction to speaking, understanding, reading, and writing Russian. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. *Prerequisites: MLL 1501 is prerequisite to MLL 1502, or consent of instructor; MLL 1502 is prerequisite to MLL 1503, or consent of instructor.*

MLL 2501 - Intermediate Russian I

Units: 4

A continuation of MLL 1303, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of Russian culture. *Prerequisites: MLL 2501 is prerequisite to MLL 2502, or consent of instructor; MLL 2502 is prerequisite to MLL 2503, or consent of instructor.*

MLL 2502 - Intermediate Russian II

Units: 4

A continuation of MLL 1303, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of Russian culture. *Prerequisites: MLL 2501 is prerequisite to MLL 2502, or consent of instructor; MLL 2502 is prerequisite to MLL 2503, or consent of instructor.*

MLL 2503 - Intermediate Russian III

Units: 4

A continuation of MLL 1303, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of Russian culture. *Prerequisites: MLL 2501 is prerequisite to MLL 2502, or consent of instructor; MLL 2502 is prerequisite to MLL 2503, or consent of instructor.*

MLL 3587 - Topics in Russian Literature and Culture in English

Units: 4

An interdisciplinary course with variable subject matter which may deal with general surveys of Russian Literature and culture, comparative readings in Russian and Western European literatures, and monographic studies on various Russian authors. Fulfills the University Writing Skills requirement for students who began work on the present degree before Fall quarter, 1985. May be repeated once for credit when content varies, for a maximum of 8 units.

Modern Languages and Literatures: Sign Language

MLL 1901 - Elementary Sign Language I

Units: 4

A basic sequence in American Sign Language with emphasis on receptive and expressive skills. Includes intensive practice, individual evaluation, and introduction to Deaf culture. *Prerequisites: MLL 1901 is prerequisite to MLL 1902, or consent of instructor; MLL 1902 is prerequisite to MLL 1903, or consent of instructor.*

MLL 1902 - Elementary Sign Language II

Units: 4

A basic sequence in American Sign Language with emphasis on receptive and expressive skills. Includes intensive practice, individual evaluation, and introduction to Deaf culture. *Prerequisites: MLL 1901 is prerequisite to MLL 1902, or consent of instructor; MLL 1902 is prerequisite to MLL 1903, or consent of instructor.*

MLL 1903 - Elementary Sign Language III

Units: 4

A basic sequence in American Sign Language with emphasis on receptive and expressive skills. Includes intensive practice, individual evaluation, and introduction to Deaf culture. *Prerequisites: MLL 1901 is prerequisite to MLL 1902, or consent of instructor; MLL 1902 is prerequisite to MLL 1903, or consent of instructor.*

MLL 2901 - Intermediate Sign Language I

Units: 4

A continuation of MLL 1903, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of Deaf culture. *Prerequisites: MLL 2901 is prerequisite to MLL 2902, or consent of instructor; MLL 2902 is prerequisite to MLL 2903, or consent of instructor.*

MLL 2902 - Intermediate Sign Language II

Units: 4

A continuation of MLL 1903, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of Deaf culture. *Prerequisites: MLL 2901 is prerequisite to MLL 2902, or consent of instructor; MLL 2902 is prerequisite to MLL 2903, or consent of instructor.*

MLL 2903 - Intermediate Sign Language III

Units: 4

A continuation of MLL 1903, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of Deaf culture. *Prerequisites: MLL 2901 is prerequisite to MLL 2902, or consent of instructor; MLL 2902 is prerequisite to MLL 2903, or consent of instructor.*

MLL 3902 - Deaf Culture

Units: 4

Analysis of factors that define the deaf community/culture. Compares and contrasts deaf culture with other minority groups. Readings about the deaf in the arts, sciences and humanities. *Prerequisites: MLL 2903 or consent of instructor.*

MLL 3903 - Topics in American Sign Language

Units: 4

Selected topics related to American Sign Language (ASL). Analysis of the structure of ASL. Conversation strategies in ASL. Cross-cultural interactions between the deaf and the hearing. Some theoretical bases of language acquisition of deaf children. *Prerequisites: MLL 2903 or consent of instructor.*

MLL 3904 - Sign Language: Field Work

Units: 4

Application in the community: state school, special classes in public schools, agencies serving the deaf. Comparison of variations in Sign Language due to ethnic, racial, educational, regional, and age factors. *Prerequisites: MLL 2903 or consent of instructor.*

Modern Languages and Literatures: Spanish

MLL 1401 - Elementary Spanish I

Units: 4

Introduction to speaking, understanding, reading, and writing Spanish. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. *Prerequisites: MLL 1401 is prerequisite to MLL 1402, or consent of instructor; MLL 1402 is prerequisite to MLL 1403, or consent of instructor.*

MLL 1402 - Elementary Spanish II

Units: 4

Introduction to speaking, understanding, reading, and writing Spanish. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. *Prerequisites: MLL 1401 is prerequisite to MLL 1402, or consent of instructor; MLL 1402 is prerequisite to MLL 1403, or consent of instructor.*

MLL 1403 - Elementary Spanish III

Units: 4

Introduction to speaking, understanding, reading, and writing Spanish. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. *Prerequisites: MLL 1401 is prerequisite to MLL 1402, or consent of instructor; MLL 1402 is prerequisite to MLL 1403, or consent of instructor.*

MLL 2401 - Intermediate Spanish I

Units: 4

A continuation of MLL 1403, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of the cultures of the Spanish-speaking world. *Prerequisites: MLL 2401 is prerequisite to MLL 2402, or consent of instructor; MLL 2402 is prerequisite to MLL 2403, or consent of instructor.*

MLL 2402 - Intermediate Spanish II

Units: 4

A continuation of MLL 1403, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of the cultures of the Spanish-speaking world. *Prerequisites: MLL 2401 is prerequisite to MLL 2402, or consent of instructor; MLL 2402 is prerequisite to MLL 2403, or consent of instructor.*

MLL 2403 - Intermediate Spanish III

Units: 4

A continuation of MLL 1403, with increased emphasis on the structure of the language, on vocabulary building and conversation, and on the appreciation of the cultures of the Spanish-speaking world. *Prerequisites: MLL 2401 is prerequisite to MLL 2402, or consent of instructor; MLL 2402 is prerequisite to MLL 2403, or consent of instructor.*

MLL 2405 - Intermediate Spanish for Bilingual Speakers II

Units: 4

Intensive three-course, intermediate level series for heritage or bilingual speakers of Spanish. Emphasis is grammar, writing, and reading. Courses prepare students for upper division classes in literature and culture in the Spanish major and must be taken in sequence. *Prerequisites: Instructor's approval.*

MLL 2406 - Intermediate Spanish for Bilingual Speakers III

Units: 4

Intensive three-course, intermediate level series for heritage or bilingual speakers of Spanish. Emphasis is grammar, writing, and reading. Courses prepare students for upper division classes in literature and culture in the Spanish major and must be taken in sequence. *Prerequisites: Instructor's approval.*

MLL 2410 - Spanish Conversation

Units: 4

A practical application of Spanish to present-day experiences. Spanish sounds and intonation; vocabulary building. *Prerequisites: MLL 2403 or consent of instructor.*

MLL 3400 - Introduction to Literary Analysis

Units: 4

An introduction to literary analysis; the recognition of the terminology, genres, and rhetorical figures as well as a discussion of movements and literary styles. May be taken concurrently with MLL 2403. *Prerequisites: MLL 2402.*

MLL 3401 - Advanced Spanish Composition and Syntax, I

Units: 4

Written Spanish and formal grammar applied to advanced composition in the language. *Prerequisites: MLL 2403 or consent of instructor.*

MLL 3402 - Advanced Spanish Composition and Syntax, II

Units: 4

Continuation of MLL 3401. *Prerequisites: MLL 3401 or consent of instructor.*

MLL 3403 - Advanced Spanish Composition and Syntax, III

Units: 4

Selected authors with special attention to style. *Prerequisites: MLL 3402 or consent of instructor.*

MLL 3404 - Spanish Terminology and Translation

Units: 4

Spanish for business, law, medicine, and teaching. Emphasis on specialized vocabulary, translation, and interpreting. *Prerequisites: MLL 2403 or consent of instructor.* May be repeated once for credit when content varies, for a maximum of 8 units.

MLL 3405 - Advanced Conversation for Community Needs

Units: 4

Written and conversational Spanish with emphasis on fluency in a specific professional area: Business, Medicine, Law, Teaching. *Prerequisites: MLL 2403 or consent of instructor.* May be repeated once for credit when content varies, for a maximum of 8 units.

MLL 3406 - Practical Spanish: Community Service

Units: 6

Students will be assisting at the University and/or in the community as tutors, translators, and teaching aides. *Prerequisites: MLL 2403 or consent of instructor.* May be repeated once for credit when content varies (for a maximum of 12 units), with a maximum of 6 units toward the certificate.

MLL 3410 - Advanced Spanish Conversation

Units: 4

A practical application of Spanish to present-day experiences. Designed to develop advanced oral communication skills. Emphasis on increasing vocabulary, accuracy and grammatical control. *Prerequisites: MLL 2403 or consent of instructor.*

MLL 3411 - Introduction to Spanish Linguistics

Units: 4

An introduction to the principles of linguistic analysis with emphasis upon examples taken from Spanish. A brief historical survey of the development of the Spanish language. *Prerequisites: MLL 2403 or consent of instructor.*

MLL 3412 - Spanish Phonetics

Units: 4

The fundamentals of Spanish pronunciation and intonation through the phonetic structure of the language. Attention given to each student's difficulties. Individual laboratory work. *Prerequisites: MLL 3411 or consent of instructor.*

Modern Languages and Literatures: Spanish Peninsular Literature and Culture

MLL 3418 - Spanish Culture and Civilization

Units: 4

A study of Spanish culture through literary examples, illustrating Spain's artistic, political, social movements and philosophical ideas. *Prerequisites: MLL 2403 or consent of instructor.*

MLL 4455 - Studies in the Golden Age of Spain

Units: 4

Specific author, movement, genre or theme of the 16th and 17th Centuries. *Prerequisites: MLL 2403 or consent of instructor.* May be repeated for credit when content varies, for a maximum of 8 units.

MLL 4457 - Survey Spanish Literature I: Medieval and Golden Age

Units: 4

Survey of Spanish literature from the Middle Ages to 1700. Socio-political, aesthetic, philosophical and literary ideas studied

through readings of major works from the Medieval, Renaissance, and Baroque periods. *Prerequisites: MLL 2403 or consent of instructor.*

MLL 4458 - Survey Spanish Literature II: 18th Century to Present

Units: 4

Survey of Spanish Literature from the 18th Century to the present. Socio-political, aesthetic, philosophical and literary ideas studied through selections of major works; neo-classicism, romanticism, naturalism, the Generation of '98, and current authors. *Prerequisites: MLL 2403 or consent of instructor.*

MLL 4459 - Studies in Spanish Literature of the Modern Age

Units: 4

Intensive study of selected authors, genres, or literary movements from 18th Century to early 20th Century. Neoclassicism, romanticism, naturalism, the Generation of '98. *Prerequisites: MLL 2403 or consent of instructor.* May be repeated two times for credit when content varies, for a maximum of 8 units when content varies.

MLL 4460 - Studies in 20th Century Spanish Literature

Units: 4

Spanish literature after the Generacion del '98; intensive study of a single literary genre, movement theme, or author from 1927 to the present. *Prerequisites: MLL 2403 or upper division standing in Spanish, or consent of instructor.* May be repeated two times for credit when content varies, for a maximum of 12 units.

Multimedia: Graduate

MM 6100 - Tech I: Principles of Digital Multimedia

Units: 4

Creation, capture, conversion, storage, transport and display of digital multimedia information. Physical basis of perception and digital representations. Multimedia input/output devices and processing architectures. Historical and conceptual basis of multimedia. Course is limited to graduate multimedia majors.

MM 6101 - Multimedia Seminar

Units: 4

Seminar on the conceptual strategies for multimedia development. Also examines key historical events in the emergence of multimedia forms and the role of multimedia in the creation of culture. Particular emphasis placed on small group working dynamics. Course is limited to graduate multimedia majors.

MM 6102 - Application of Learning Theories to Multimedia Design

Units: 4

Learning theories in creating effective educational multimedia for CD and World Wide Web. Trends in cognitive, social, psychological, developmental, and humanistic theories for multimedia content development. *Prerequisites: MM 6101 and familiarity with at least one development methodology (e.g., computer software development, theater or video scripting, or educational materials development).*

MM 6103 - Business Basics in Multimedia

Units: 4

Basic business skills for the new economy. Includes options for employment, various uses of multimedia in industry, and how to create a multimedia business. Business plan creation, marketing, cash flow analysis, and presentation skills are emphasized.

MM 6110 - Tech II: Multimedia Network and Hardware Development

Units: 4

Theory and practice of data networking. Analysis, design and construction of electronic multimedia components including the use of sensors, effectors and controllers. *Prerequisites: MM 6100.*

MM 6120 - Tech III: Multimedia Software Development

Units: 4

Introduction to scripting and programming for multimedia production. *Prerequisites: MM 6110.* Two hrs. lect., 4 hrs. act.

MM 6350 - Audio Production for Multimedia

Units: 4

Developing effective audio for multimedia programs using a variety of digital production tools. Students will develop multimedia audio presentations. *Prerequisites: MM 4850.* Two hrs. lect., 4 hrs. act.

MM 6600 - Interactive Content Development

Units: 4

Team-based interactive content development and management with work on faculty-derived projects. Field trips may be required. Portfolio review and skill assessment required for admittance. *Prerequisites: Consent of instructor or Program approval.* May be repeated twice for credit, when content varies, for a maximum of 12 units. *A-F grading only.*

MM 6805 - Forum

Units: 1

Lectures and presentations by professionals and students working in a wide variety of multimedia related disciplines. Forums are open to the general public. May be repeated for credit, for a maximum of 4 units.

MM 6860 - Introduction to Multimedia Project Development

Units: 4

Small development projects to evaluate the potential of individual students to succeed as members of a thesis team. Establishment of research project teams and the development of thesis proposals. *Prerequisites: MM 6100, MM 6101, MM 6120 and classified or conditionally classified standing in the Multimedia, M.A.*

MM 6870 - Multimedia Development I

Units: 4

Collaborative interdisciplinary teams begin to develop multimedia projects. Design and creation of interactive audio, video, graphic and narrative content. *Prerequisites: MM 6860 and advancement to candidacy. Miscellaneous course fee. See quarterly Class Schedule for current fee.*

MM 6880 - Multimedia Development II

Units: 4

Continuation of multimedia projects begun by the teams established in Multimedia Development I. Project prepared for completion in MM 6899. *Prerequisites: MM 6870. A miscellaneous course fee will be charged. Consult the quarterly Class Schedule for the current fee.*

MM 6898 - Cooperative Education

Units: 1-8

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least a 3.0 GPA; departmental approval of activity.* May be repeated for credit, for a maximum of 8 units. A maximum of 8 units accepted toward the major. *CR/NC grading only.*

MM 6899 - Project

Units: 4

Completion of an original professional quality digital interactive multimedia project and comprehensive written documentation. The project and documentation are submitted to the program committee which specifies the format. Weekly supervision by a faculty advisor and quarterly reviews by a faculty committee. Oral presentation of multimedia project is required. *Prerequisites: MM 6880. Miscellaneous course fee. See quarterly Class Schedule for current fee.*

MM 6900 - Independent Study

Units: 1-4

Independent study under direction of faculty. May be repeated for credit, with consent of advisor, for a maximum of 12 units.

MM 6999 - Issues in Multimedia

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in multimedia. May be repeated for credit when content varies, for a maximum of 8 units.

Music

MUS 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

Music: Applied

MUS 1314 - Basic Piano Class I

Units: 1

Group instruction in piano for music majors. *Co-requisites: MUS 1027 and 1031.* Two hrs. act. MUS 1027-29 and 1031-33 and 1314-16 to be taken concurrently.

MUS 1315 - Basic Piano Class II

Units: 1

Group instruction in piano for music majors. *Prerequisites:* MUS 1314. *Co-requisites:* MUS 1028 and 1032. Two hrs. act. MUS 1027-29 and 1031-33 and 1314-16 to be taken concurrently.

MUS 1316 - Basic Piano Class III

Units: 1

Group instruction in piano for music majors. *Prerequisites:* MUS 1315. *Co-requisites:* MUS 1029 and 1033. Two hrs. act. MUS 1027-29 and 1031-33 and 1314-16 to be taken concurrently.

MUS 1601 - Level 10 Vocal Coaching

Units: 1

Individual Instrumental Coaching in collaborative music making for music majors or minors with Freshman-level performance ability. Coaching times arranged according to Level 10 degree recital expectations as outlined in the music major handbook. *Prerequisites:* Consent of instructor or Departmental approval. *Co-requisites:* Concurrent enrollment in at least one course drawn from MUS 1610- 1699 or MUS 1210-1299. May be repeated twice for credit for a maximum of 3 units. Students may enroll in a maximum of three units in a single quarter. A-F grading only.

MUS 1602 - Level 10 Instrumental Coaching

Units: 1

Individual vocal coaching in collaborative music making for music majors or minors with Freshman-level performance ability. Coaching times arranged according to Level 10 degree recital expectations as outlined in the music major handbook. *Prerequisites:* Consent of instructor or Departmental approval. *Co-requisites:* Concurrent enrollment in MUS 1620 or MUS 1220. May be repeated twice for credit for a maximum of 3 units. Students may enroll in a maximum of three units in a single quarter. A-F grading only.

MUS 1610 - Level 10 Applied Study: Piano

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1611 - Level 10 Applied Study: Organ

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1612 - Level 10 Applied Study: Harpsichord

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1620 - Level 10 Applied Study: Voice

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1630 - Level 10 Applied Study: Violin

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1631 - Level 10 Applied Study: Viola

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1632 - Level 10 Applied Study: Cello

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1633 - Level 10 Applied Study: Bass

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1634 - Level 10 Applied Study: Harp

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1635 - Level 10 Applied Study: Guitar

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1640 - Level 10 Applied Study: Flute

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1641 - Level 10 Applied Study: Oboe

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1642 - Level 10 Applied Study: Clarinet

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1643 - Level 10 Applied Study: Bassoon

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1644 - Level 10 Applied Study: Saxophone

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1650 - Level 10 Applied Study: Trumpet

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1651 - Level 10 Applied Study: French Horn

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1652 - Level 10 Applied Study: Trombone

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1653 - Level 10 Applied Study: Baritone

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1654 - Level 10 Applied Study: Tuba

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1660 - Level 10 Applied Study: Percussion

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1670 - Level 10 Applied Study: Composition

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1680 - Level 10 Applied Study: Conducting

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1685 - Level 10 Applied Study: Interactive and Media Composition

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1690 - Level 10 Applied Study: Jazz Composition

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1691 - Level 10 Applied Study: Jazz Piano and Keyboard

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1692 - Level 10 Applied Study: Jazz Guitar

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1693 - Level 10 Applied Study: Jazz Bass

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1694 - Level 10 Applied Study: Jazz Drums and Percussion

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1695 - Level 10 Applied Study: Jazz Saxophone

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1696 - Level 10 Applied Study: Jazz Trumpet

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 1697 - Level 10 Applied Study: Jazz Trombone

Units: 1

Individual instruction for music majors or minors with Freshman-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 2311 - Intermediate Class Piano I

Units: 1

Continuation of MUS 1316. MUS 2311: *Prerequisites: Major mode formulae, MUS 1316 and MUS 1033 or equivalents. MUS 2312 : Minor mode formulae; MUS 2311 or consent of instructor. MUS 2313: open score reading; MUS 2312 or consent of instructor.* Two hrs. act.

MUS 2312 - Intermediate Class Piano II

Units: 1

Continuation of MUS 1316. MUS 2311: *Prerequisites: Major mode formulae, MUS 1316 and MUS 1033 or equivalents. MUS 2312 : Minor mode formulae; MUS 2311 or consent of instructor. MUS 2313: open score reading; MUS 2312 or consent of instructor.* Two hrs. act.

MUS 2313 - Intermediate Class Piano III

Units: 1

Continuation of MUS 1316. MUS 2311: *Prerequisites: Major mode formulae, MUS 1316 and MUS 1033 or equivalents. MUS 2312 : Minor mode formulae; MUS 2311 or consent of instructor. MUS 2313: open score reading; MUS 2312 or consent of instructor.* Two hrs. act.

MUS 2321 - Basic Voice

Units: 1

Class instruction in fundamentals of singing. May be repeated once for credit, for a maximum of 2 units. Two hrs. act.

MUS 2371 - Basic Guitar

Units: 1

Fundamentals of playing guitar with emphasis on developing competencies sufficient to employ the instrument as a teaching tool.
Prerequisites: Music major or consent of instructor. Two hours activity.

MUS 2601 - Level 20 Vocal Coaching

Units: 1

Individual vocal coaching in collaborative music making for music majors or minors with Sophomore-level performance ability. Coaching times arranged according to Level 20 degree recital expectations as outlined in the music major handbook.

Prerequisites: Consent of instructor or Departmental approval. Co-requisites: Concurrent enrollment in MUS 1220 or MUS 2620. May be repeated three times for credit for a maximum of four units. Students may enroll in a maximum of three units in a single quarter. A-F grading only.

MUS 2602 - Level 20 Instrumental Coaching

Units: 1

Individual Instrumental Coaching in collaborative music making for music majors or minors with Sophomore-level performance ability. Coaching times arranged according to Level 20 degree recital expectations as outlined in the music major handbook.

Prerequisites: Consent of instructor or Departmental approval. Co-requisites: Concurrent enrollment in at least one course drawn from MUS 2610-MUS 2699 or MUS 1210-MUS 1299. May be repeated three times for credit for a maximum of four units. Students may enroll in a maximum of three units in a single quarter. A-F grading only.

MUS 2610 - Level 20 Applied Study: Piano

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.*

MUS 2611 - Level 20 Applied Study: Organ

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.*

MUS 2612 - Level 20 Applied Study: Harpsichord

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530).* May be repeated twice for credit for a maximum of 3 units. *A-F grading only.*

MUS 2620 - Level 20 Applied Study: Voice

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530).* May be repeated twice for credit for a maximum of 3 units. *A-F grading only.*

MUS 2630 - Level 20 Applied Study: Violin

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530).* May be repeated twice for credit for a maximum of 3 units. *A-F grading only.*

MUS 2631 - Level 20 Applied Study: Viola

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530).* May be repeated twice for credit for a maximum of 3 units. *A-F grading only.*

MUS 2632 - Level 20 Applied Study: Cello

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530).* May be repeated twice for credit for a maximum of 3 units. *A-F grading only.*

MUS 2633 - Level 20 Applied Study: Bass

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530).* May be repeated twice for credit for a maximum of 3 units. *A-F grading only.*

MUS 2634 - Level 20 Applied Study: Harp

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530).* May be repeated twice for credit for a maximum of 3 units. *A-F grading only.*

MUS 2635 - Level 20 Applied Study: Guitar

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530).* May be repeated twice for credit for a maximum of 3 units. *A-F grading only.*

MUS 2640 - Level 20 Applied Study: Flute

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530).* May be repeated twice for credit for a maximum of 3 units. *A-F grading only.*

MUS 2641 - Level 20 Applied Study: Oboe

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530).* May be repeated twice for credit for a maximum of 3 units. *A-F grading only.*

MUS 2642 - Level 20 Applied Study: Clarinet

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530).* May be repeated twice for credit for a maximum of 3 units. *A-F grading only.*

MUS 2643 - Level 20 Applied Study: Bassoon

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites:*

Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 2644 - Level 20 Applied Study: Saxophone

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.*

MUS 2650 - Level 20 Applied Study: Trumpet

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.*

MUS 2651 - Level 20 Applied Study: French Horn

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.*

MUS 2652 - Level 20 Applied Study: Trombone

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.*

MUS 2653 - Level 20 Applied Study: Baritone

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.*

MUS 2654 - Level 20 Applied Study: Tuba

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530).* May be repeated twice for credit for a maximum of 3 units. *A-F grading only.*

MUS 2660 - Level 20 Applied Study: Percussion

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530).* May be repeated twice for credit for a maximum of 3 units. *A-F grading only.*

MUS 2670 - Level 20 Applied Study: Composition

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530).* May be repeated twice for credit for a maximum of 3 units. *A-F grading only.*

MUS 2680 - Level 20 Applied Study: Conducting

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530).* May be repeated twice for credit for a maximum of 3 units. *A-F grading only.*

MUS 2685 - Level 20 Applied Study: Interactive and Media Composition

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530).* May be repeated twice for credit for a maximum of 3 units. *A-F grading only.*

MUS 2690 - Level 20 Applied Study: Jazz Composition

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530).* May be repeated twice for credit for a maximum of 3 units. *A-F grading only.*

MUS 2691 - Level 20 Applied Study: Jazz Piano and Keyboard

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530).* May be repeated twice for credit for a maximum of 3 units. *A-F grading only.*

MUS 2692 - Level 20 Applied Study: Jazz Guitar

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530).* May be repeated twice for credit for a maximum of 3 units. *A-F grading only.*

MUS 2693 - Level 20 Applied Study: Jazz Bass

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530).* May be repeated twice for credit for a maximum of 3 units. *A-F grading only.*

MUS 2694 - Level 20 Applied Study: Jazz Drums and Percussion

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530).* May be repeated twice for credit for a maximum of 3 units. *A-F grading only.*

MUS 2695 - Level 20 Applied Study: Jazz Saxophone

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530).* May be repeated twice for credit for a maximum of 3 units. *A-F grading only.*

MUS 2696 - Level 20 Applied Study: Jazz Trumpet

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites:*

Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.

MUS 2697 - Level 20 Applied Study: Jazz Trombone

Units: 1

Individual instruction for music majors or minors with Sophomore-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 1610-MUS 1699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-3530). May be repeated twice for credit for a maximum of 3 units. A-F grading only.*

MUS 3601 - Level 30 Vocal Coaching

Units: 1

Individual vocal coaching in collaborative music making for music majors or minors with Junior-level performance ability. Coaching times arranged according to Level 30 degree recital expectations as outlined in the music major handbook. *Prerequisites: Consent of instructor or Departmental approval. Co-requisites: Concurrent enrollment in MUS 3220 or MUS 3620. May be repeated five times for credit for a maximum of six units. Students may enroll in a maximum of 3 units in a single quarter. A-F grading only.*

MUS 3602 - Level 30 Instrumental Coaching

Units: 1

Individual Instrumental Coaching in collaborative music making for music majors or minors with Junior-level performance ability. Coaching times arranged according to Level 30 degree recital expectations as outlined in the music major handbook. *Prerequisites: Consent of instructor or Departmental approval. Co-requisites: Concurrent enrollment in at least one course drawn from MUS 3610-MUS 3699. May be repeated five times for credit for a maximum of six units. Students may enroll in a maximum of 3 units in a single quarter. A-F grading only.*

MUS 3609 - Recital

Units: 1

Preparation for and performance of a public musical recital. Capstone experience for level 30 applied instruction and a prerequisite for level 40 applied instruction. *Prerequisites: One (1) quarter of MUS 3610-MUS 3697 Applied Music (major performance media). Co-requisites: MUS 3610-MUS 3697. A-F grading only.*

MUS 3610 - Level 30 Applied Study: Piano

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.*

MUS 3611 - Level 30 Applied Study: Organ

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. Co-requisites: Concurrent enrollment*

in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 3612 - Level 30 Applied Study: Harpischord

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 3620 - Level 30 Applied Study: Voice

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 3630 - Level 30 Applied Study: Violin

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 3631 - Level 30 Applied Study: Viola

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 3632 - Level 30 Applied Study: Cello

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 3633 - Level 30 Applied Study: Bass

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 3634 - Level 30 Applied Study: Harp

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 3635 - Level 30 Applied Study: Guitar

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 3640 - Level 30 Applied Study: Flute

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 3641 - Level 30 Applied Study: Oboe

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 3642 - Level 30 Applied Study: Clarinet

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 3643 - Level 30 Applied Study: Bassoon

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 3644 - Level 30 Applied Study: Saxophone

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 3650 - Level 30 Applied Study: Trumpet

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 3651 - Level 30 Applied Study: French Horn

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 3652 - Level 30 Applied Study: Trombone

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 3653 - Level 30 Applied Study: Baritone

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second

quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. *A-F grading only.*

MUS 3654 - Level 30 Applied Study: Tuba

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study.* May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. *A-F grading only.*

MUS 3660 - Level 30 Applied Study: Percussion

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study.* May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. *A-F grading only.*

MUS 3670 - Level 30 Applied Study: Composition

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study.* May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. *A-F grading only.*

MUS 3680 - Level 30 Applied Study: Conducting

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study.* May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. *A-F grading only.*

MUS 3685 - Level 30 Applied Study: Interactive and Media Composition

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites: Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. Co-requisites: Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study.* May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. *A-F grading only.*

MUS 3690 - Level 30 Applied Study: Jazz Composition

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 3691 - Level 30 Applied Study: Jazz Piano and Keyboard

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 3692 - Level 30 Applied Study: Jazz Guitar

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 3693 - Level 30 Applied Study: Jazz Bass

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 3694 - Level 30 Applied Study: Jazz Drums and Percussion

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 3695 - Level 30 Applied Study: Jazz Saxophone

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 3696 - Level 30 Applied Study: Jazz Trumpet

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 3697 - Level 30 Applied Study: Jazz Trombone

Units: 1

Individual instruction for music majors or minors with Junior-level performance ability. Audition required. *Prerequisites:* Completion of the corresponding previous level course drawn from MUS 2610-MUS 2699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 3609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 4601 - Level 40 Vocal Coaching

Units: 1

Individual vocal coaching in collaborative music making for music majors or minors with Senior-level performance ability. Coaching times arranged according to Level 40 degree recital expectations as outlined in the music major handbook. *Prerequisites:* Consent of instructor or Departmental approval. *Co-requisites:* Concurrent enrollment in MUS 3220 or MUS 4620. May be repeated seven times for credit for a maximum of eight units. Students may enroll in a maximum of 3 units in a single quarter. A-F grading only.

MUS 4602 - Level 40 Instrumental Coaching

Units: 1

Individual instrumental coaching in collaborative music making for music majors or minors with Senior-level performance ability. Coaching times arranged according to Level 40 degree recital expectations as outlined in the music major handbook. *Prerequisites:* Consent of instructor or Departmental approval. *Co-requisites:* Concurrent enrollment in at least one course drawn from MUS 4610- 4699. May be repeated seven times for credit for a maximum of eight units. Students may enroll in a maximum of 3 units in a single quarter.

MUS 4609 - Level 40 Recital

Units: 1

Preparation for and performance of a public musical recital. Capstone experience for applied music instruction. *Prerequisites:* MUS 3609; two (2) quarters of MUS 4610-MUS 4697 Applied Music (major performance media). *Co-requisites:* MUS 4610-MUS 4697. A-F grading only.

MUS 4610 - Level 40 Applied Study: Piano

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 4611 - Level 40 Applied Study: Organ

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 4612 - Level 40 Applied Study: Harpsichord

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 4620 - Level 40 Applied Study: Voice

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 4630 - Level 40 Applied Study: Violin

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 4631 - Level 40 Applied Study: Viola

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 4632 - Level 40 Applied Study: Cello

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital

(MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 4633 - Level 40 Applied Study: Bass

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 4634 - Level 40 Applied Study: Harp

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 4635 - Level 40 Applied Study: Guitar

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 4640 - Level 40 Applied Study: Flute

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 4641 - Level 40 Applied Study: Oboe

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 4642 - Level 40 Applied Study: Clarinet

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. *A-F grading only.*

MUS 4643 - Level 40 Applied Study: Bassoon

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. *A-F grading only.*

MUS 4644 - Level 40 Applied Study: Saxophone

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. *A-F grading only.*

MUS 4650 - Level 40 Applied Study: Trumpet

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. *A-F grading only.*

MUS 4651 - Level 40 Applied Study: French Horn

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. *A-F grading only.*

MUS 4652 - Level 40 Applied Study: Trombone

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. *A-F grading only.*

MUS 4653 - Level 40 Applied Study: Baritone

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 4654 - Level 40 Applied Study: Tuba

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 4660 - Level 40 Applied Study: Percussion

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 4670 - Level 40 Applied Study: Composition

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 4680 - Level 40 Applied Study: Conducting

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 4685 - Level 40 Applied Study: Interactive and Media Composition

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital

(MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 4690 - Level 40 Applied Study: Jazz Composition

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 4691 - Level 40 Applied Study: Jazz Piano and Keyboard

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 4692 - Level 40 Applied Study: Jazz Guitar

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 4693 - Level 40 Applied Study: Jazz Bass

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 4694 - Level 40 Applied Study: Jazz Drums and Percussion

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. A-F grading only.

MUS 4695 - Level 40 Applied Study: Jazz Saxophone

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. *A-F grading only.*

MUS 4696 - Level 40 Applied Study: Jazz Trumpet

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. *A-F grading only.*

MUS 4697 - Level 40 Applied Study: Jazz Trombone

Units: 1

Individual instruction for music majors or minors with Senior-level performance ability. Audition required. *Prerequisites:* Completion of MUS 3609. Completion of the corresponding previous level course drawn from MUS 3610-MUS 3699. *Co-requisites:* Concurrent enrollment in a Major Performance Ensemble (MUS 3500-MUS 3530). Concurrent enrollment in Recital (MUS 4609) during the second quarter of study. May be repeated for credit for a maximum of 6 units. Students may enroll in a maximum of 2 units in a single quarter. *A-F grading only.*

Music: Applied: Graduate

MUS 6280 - Advanced Applied Conducting

Units: 2

Ensemble conducting techniques including stylistic, pedagogical, and physical studies in gesture. Score analysis and ear training through the study of music from all genres and historical periods. Advanced rehearsal techniques and program building, including the development of ensemble. *Prerequisites:* Consent of instructor. May be repeated five times for credit for a maximum of 12 units.

MUS 6601 - Graduate Vocal Coaching

Units: 1

Individual vocal coaching in collaborative music making for music majors or minors with Graduate-level performance ability. Coaching times arranged according to graduate degree recital expectations as outlined in the music major handbook.

Prerequisites: Consent of instructor or Departmental approval. *Co-requisites:* Concurrent enrollment in MUS 6220 or MUS 6620. May be repeated 11 times for credit for a maximum of 12 units. Students may enroll in a maximum of 3 units in a single quarter. *A-F grading only.*

MUS 6602 - Graduate Instrumental Coaching

Units: 1

Individual instrumental coaching in collaborative music making for music majors or minors with Graduate-level performance ability. Coaching times arranged according to graduate degree recital expectations as outlined in the music major handbook.

Prerequisites: Consent of instructor or Departmental approval. *Co-requisites:* Concurrent enrollment in at least one course

drawn from MUS 6610-MUS 6699 or MUS 6210-MUS 6299. May be repeated 11 times for credit for a maximum of 12 units. Students may enroll in a maximum of 3 units in a single quarter. A-F grading only.

MUS 6610 - Graduate Applied Study: Piano

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6611 - Graduate Applied Study: Organ

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6612 - Graduate Applied Study: Harpsichord

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6620 - Graduate Applied Study: Voice

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6630 - Graduate Applied Study: Violin

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6631 - Graduate Applied Study: Viola

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6632 - Graduate Applied Study: Cello

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6633 - Graduate Applied Study: Bass

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6634 - Graduate Applied Study: Harp

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6635 - Graduate Applied Study: Guitar

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6640 - Graduate Applied Study: Flute

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6641 - Graduate Applied Study: Oboe

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6642 - Graduate Applied Study: Clarinet

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6643 - Graduate Applied Study: Bassoon

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6644 - Graduate Applied Study: Saxophone

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6650 - Graduate Applied Study: Trumpet

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6651 - Graduate Applied Study: French Horn

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6652 - Graduate Applied Study: Trombone

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6653 - Graduate Applied Study: Baritone

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6654 - Graduate Applied Study: Tuba

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6660 - Graduate Applied Study: Percussion

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6670 - Graduate Applied Study: Composition

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6680 - Graduate Applied Study: Conducting

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6685 - Graduate Applied Study: Interactive and Media Composition

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6690 - Graduate Applied Study: Jazz Composition

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6691 - Graduate Applied Study: Jazz Piano and Keyboard

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6692 - Graduate Applied Study: Jazz Guitar

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6693 - Graduate Applied Study: Jazz Bass

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6694 - Graduate Applied Study: Jazz Drums and Percussion

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6695 - Graduate Applied Study: Jazz Saxophone

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6696 - Graduate Applied Study: Jazz Trumpet

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

MUS 6697 - Graduate Applied Study: Jazz Trombone

Units: 1-3

Individual instruction for music majors or minors with Graduate-level performance ability. Audition required. At the end of third quarter of study, students demonstrate their progress before a faculty jury. A failed jury results in a failing grade for the course.

Prerequisites: Graduate level performance ability as outlined in the Department of Music Handbook. May be repeated for credit for a maximum of 12 units. Students may enroll in a maximum of two units in a single quarter. A-F grading only.

Music: Courses for Non-Music Majors

MUS 1004 - Introduction to World Music

Units: 4

Survey of the music and artistic media of non-European cultures including Polynesia, Australia, Africa, Asia, Middle East and native North America. Development of musical understanding through exploration of basic universal elements of music, dance, ceremony and common human values. Previous musical training not necessary. Field trips may be required. Not open to students with credit for MUS 1014.

MUS 1006 - History of Rock and Roll

Units: 4

A survey of important performers and styles from the 1950's to the present, and of the music's African, rhythm and blues, and classical music sources. Previous musical training not necessary. Not open to students with credit for MUS 2130.

MUS 1007 - History of Jazz

Units: 4

Periods, major performers and composers, trends, influences, stylistic features and cultural significance. Field trips may be required.

MUS 1008 - Music Theory for Non-Music Majors I

Units: 4

Fundamentals of music notation. Major and minor scale and chord formations. Emphasis on practical musicianship through rhythmic exercises and reading of songs on simple melody and rhythm instruments. Recommended for non-music majors in Liberal Studies and Multiple Subject Credential programs. Three hrs. lect., 2 hrs. act.

MUS 1014 - Introduction to World Music History

Units: 4

Survey of the music of selected cultures. Relationships among art, music, and religions from around the world with emphasis on cultural, historical, and social influences. Not open to those with credit for MUS 1004/ANTH 1004.

MUS 1015 - Basic Musicianship Through Guitar for Non-Music Majors I

Units: 4

Development of music reading and understanding through study of guitar. Recommended for non-music majors pursuing a credential program. Students provide own guitar. Three hrs. lect., 2 hrs. act.

MUS 1104 - Global Hip-Hop

Units: 4

Exploration of the spread of hip-hop throughout the world, examining the social context, stylistic sources and musical work of artists from the US, Africa, Asia, Europe, and Latin America.

MUS 1106 - Blues, R&B and Soul

Units: 4

Examination of three musical genres that form the backbone of American popular music - blues, rhythm & blues, and soul - and the way these styles influence popular music and culture in the US and the rest of the world.

MUS 2269 - Arts and Media of the Golden State

Units: 4

The role of creativity in California, the mass-media cultural center of the world, including the stage, screen, recording industry, media, Silicon Valley, and gaming. Introduction to arts and media forms with an emphasis on the roles of delivery and content in developing a personal understanding and appreciation for arts and culture. Requires attendance at on- and off- campus arts and cultural events. Not open to students with credit for THEA 2269.

MUS 3002 - What to Listen for in Music

Units: 4

Development of a greater appreciation and enjoyment of music through study of the musical content of selected works. Study of the elements of music to develop critical listening skills applicable to all styles of music. Previous musical training not necessary. Field trips may be required.

MUS 3014 - Introduction to World Music and Culture

Units: 4

Music as tradition and the continuity it nurtures within a culture. Traditional music of Africa, Asia, Latin America and the Middle East will be examined incorporating folk, classical, world beat, jazz, popular and experimental musics.

MUS 3080 - Music Entrepreneurship

Units: 4

Survey of the music business from the perspective of performing artists and composers. The course will focus on four areas: copyright and intellectual property law, the role of record labels, careers in the music business, and the musician as entrepreneur.

MUS 3120 - Art Song Literature

Units: 4

An historical survey of art song literature with a focus on important composers and their respective contributions to the genre. Includes the study of important song cycles. Intended for singers, teaching professionals, and aspiring private studio teachers.

Prerequisites: Consent of instructor.

MUS 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least a 2.0 GPA; departmental approval of activity.* May be repeated for credit, for a maximum of 8 units. Not applicable to the music major; a maximum of 4 units may be applied to the music minor. *CR/NC grading only.*

MUS 3999 - Issues in Music

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in music. May be repeated for credit when content varies, for a maximum of 8 units.

Music: Education

MUS 2331 - Basic Orchestral Instruments: Violin and Viola

Units: 1

Instruction in the fundamentals of playing orchestral instruments; methods and materials for use in elementary and secondary schools. May be repeated once for credit, for a maximum of 2 units. Two hours activity.

MUS 2332 - Basic Orchestral Instruments: Cello and Bass

Units: 1

Instruction in the fundamentals of playing orchestral instruments; methods and materials for use in elementary and secondary schools. May be repeated once for credit, for a maximum of 2 units. Two hours activity.

MUS 2341 - Basic Orchestral Instruments: Clarinet

Units: 1

Instruction in the fundamentals of playing orchestral instruments; methods and materials for use in elementary and secondary schools. May be repeated once for credit, for a maximum of 2 units. Two hours activity.

MUS 2342 - Basic Orchestral Instruments: Double Reeds

Units: 1

Instruction in the fundamentals of playing orchestral instruments; methods and materials for use in elementary and secondary schools. *Prerequisites: MUS 2341* May be repeated once for credit, for a maximum of 2 units. Two hours activity.

MUS 2343 - Basic Orchestral Instruments: Flute and Saxophone

Units: 1

Instruction in the fundamentals of playing orchestral instruments; methods and materials for use in elementary and secondary schools. *Prerequisites: MUS 2341* May be repeated once for credit, for a maximum of 2 units. Two hours activity.

MUS 2355 - Basic Orchestral Instruments: Basic Brass

Units: 1

Instruction in the fundamentals of playing orchestral instruments; methods and materials for use in elementary and secondary schools. Fundamentals of playing brass orchestral instruments (trumpet, French horn, trombone, baritone, tuba) with attention to elementary and secondary school teaching techniques and materials. Two instruments will be studied each quarter. *Prerequisites: Music major; others by consent of instructor.* May be repeated once for credit, for a maximum of 2 units. Two hours activity.

MUS 2361 - Basic Orchestral Instruments: Percussion

Units: 1

Instruction in the fundamentals of playing orchestral instruments; methods and materials for use in elementary and secondary schools. May be repeated once for credit, for a maximum of 2 units. Two hours activity.

MUS 2410 - Foundations of Music Education

Units: 4

Overview of music education from K-12 for prospective music teachers. Students are introduced to methods by Kodaly, Orff, Suzuki, and others. Topics: philosophy of music education, music pedagogy for K-12, and the history, economics and politics of music education. *A-F grading only.*

MUS 3095 - Music Technology for Educators

Units: 3

Instruction in uses of audio and software, and software for desktop, interactive, and music publishing to aid in the development of music education curricula, programs, and lessons. Two hrs. lect., 2 hrs. lab.

MUS 3370 - Basic Conducting

Units: 3

Basic techniques of conducting including simple, compound and asymmetrical meters, expression and interpretation through observation and laboratory experience. *Prerequisites: Upper division standing or consent of instructor.*

MUS 3380 - Choral Conducting

Units: 3

Special techniques of choral conducting including vocal and score reading and analysis, interpretation, and rehearsal through observation and laboratory experience. *Prerequisites: Upper division standing or consent of instructor; MUS 3370 or equivalent must precede MUS 3380.*

MUS 3390 - Instrumental Conducting

Units: 3

Special techniques of instrumental conducting including score reading and analysis, interpretation, rehearsal through observation and laboratory experience. *Prerequisites: Upper division standing or consent of instructor. MUS 3370 or equivalent must precede MUS 3390.*

MUS 4435 - Seminar in Public School Instrumental Teaching Techniques

Units: 3

Provides opportunity for students intending to become teachers to develop rehearsal techniques, organizational procedures related to public school band and orchestra programs; to become familiar with public school teaching materials; to further develop conducting techniques; and to improve secondary instruments skills. Field trips may be required. *Prerequisites: Basic Conducting; two quarters each, basic strings, woodwinds, brass, one of percussion; others by consent of instructor.*

MUS 4440 - Seminar in Public School Choral Teaching Techniques

Units: 3

Development of rehearsal techniques and organizational procedures related to choirs and vocal ensembles in the public schools.

Teaching materials and appropriate literature from various stylistic periods. Field trips may be required. *Prerequisites: MUS 3370 and MUS 3380, or consent of instructor.*

MUS 4445 - Seminar in Elementary Classroom Music Teaching Techniques

Units: 3

Development of classroom management and teaching techniques appropriate for elementary general music and choral classes. Emphasis on the Kodaly method and related instructional materials. Field trips may be required. *Prerequisites: Upper division standing or consent of instructor.*

Music: Graduate

MUS 6000 - Seminar in Bibliography and Research Methods

Units: 3

Analysis of specialized bibliography and methodology employed in the four main areas of music history/literature, theory and composition, music education, and performance. Individual research on selected topics. Required for Advancement to Candidacy. *Prerequisites: Graduate standing in music or consent of the instructor.*

MUS 6085 - Interactivity with Sound & Music I

Units: 4

Rudiments of hardware and software connectivity between different devices and programs for sound and music. Topics include the use of MIDI, Open Sound Control, and non-musically focused technology to create new sounds and musical experiences. *Prerequisites: Graduate standing or consent of instructor.*

MUS 6086 - Interactivity with Sound & Music II

Units: 4

Continuation of Interactive Sound & Music I. Detailed study of the use of consumer hardware in conjunction with software protocols for controlling sound and music over computer networks. Rudimentary algorithmic music composition. *Prerequisites: MUS 6085 or consent of instructor.*

MUS 6899 - Project

Units: 1-3

Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense may be required. *Prerequisites: Graduate standing. Maximum of 3 units per student.*

MUS 6900 - Independent Study

Units: 1-4

MUS 6910 - University Thesis

Units: 1-6

Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally

required. (See also, "University Thesis Writing Guide," www.csueastbay.edu/thesiswritingguide.) *Prerequisites: Graduate standing. Maximum of 6 units per student.*

MUS 6999 - Issues in Music

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in music. May be repeated for credit when content varies, for a maximum of 8 units.

Music: History and Literature

MUS 1155 - Music Through the Ages

Units: 4

Introduction to the history of Western art music. Emphasis on listening, reading, and beginning score study to develop awareness of style and structure. Influence of various styles and genres of music from other cultures may be included. *Prerequisites: MUS 1032 or permission of instructor.*

MUS 3155 - Music Literature and Analysis I

Units: 4

Emphasis given to style analysis; the relationship of music to the social and cultural background of each epoch. I. Music from the beginnings of Western Civilization through Medieval and Renaissance times. *Prerequisites: MUS 2033 or consent of instructor.*

MUS 3156 - Music Literature and Analysis II

Units: 4

Emphasis given to style analysis; the relationship of music to the social and cultural background of each epoch. II. Music of the Baroque and Classical periods. *Prerequisites: MUS 2033 or consent of instructor.*

MUS 3157 - Music Literature and Analysis III

Units: 4

Emphasis given to style analysis; the relationship of music to the social and cultural background of each epoch. III. Music of the Romantic and Contemporary periods. *Prerequisites: MUS 2033 or consent of instructor.*

MUS 3297 - Orchestral Repertoire I

Units: 2

Survey of instrumental Western classical music ensemble repertoire. Examination of music performance conventions of the baroque and classical periods. Study and performance of standard orchestral repertoire excerpts relevant to their instrument, with an emphasis on preparation for professional performance situations. *Prerequisites: MUS 1033. A-F grading only.*

MUS 3298 - Orchestral Repertoire II

Units: 2

Continuation of MUS 3297. Examination of music performance conventions of the Romantic period. Study and performance of standard orchestral repertoire excerpts relevant to their instrument, with an emphasis on preparation for professional performance situations. *Prerequisites: MUS 1033, MUS 3297. A-F grading only.*

MUS 3299 - Orchestral Repertoire III

Units: 2

Continuation of MUS 3298. Examination of music performance conventions of twentieth century classical music, film music, and Broadway styles. Study and performance of standard orchestral repertoire excerpts relevant to their instrument, with an emphasis on preparation for professional performance situations. *Prerequisites: MUS 1033, MUS 3297, MUS 3298. A-F grading only.*

Music: History and Literature: Graduate

MUS 6100 - Seminar in History of Western Music

Units: 4

Advanced review of the history of Western music from the Medieval period to the present. Emphasis on stylistic, formal, and theoretical development. *Prerequisites: Graduate standing or consent of instructor. Not for credit toward M.A. degree in music.*

MUS 6105 - History of Music, Medieval to Renaissance

Units: 3

A comprehensive study of musical forms and styles from 1100 to 1600 with detailed analyses of representative works and theoretical writings. *Prerequisites: Graduate standing in music or consent of instructor.*

MUS 6115 - Music in the Baroque Period

Units: 3

A detailed study of musical styles, forms, and performance practice from 1600 to 1750, with analyses of representative works. *Prerequisites: Graduate standing in music or consent of instructor.*

MUS 6125 - Music of the Classical Period

Units: 3

A detailed study of the development of musical forms and performance media, from the Rococo to the end of the 18th Century. *Prerequisites: Graduate standing in music or consent of instructor.*

MUS 6135 - Music of the Romantic Period

Units: 3

An intensive study of the structure and development of music from Beethoven through the end of the 19th Century. *Prerequisites: Graduate standing in music or consent of instructor.*

MUS 6155 - Music and Culture of Asia

Units: 3

Issues of identity, politics, modernization, and globalization, as encountered through the music of the Asian diaspora of the Bay Area. Music of India, Indonesia, Japan and central Asian countries will be studied from an ethnomusicological perspective. *Prerequisites: Graduate standing in Music or permission of instructor.*

MUS 6180 - Contemporary Music

Units: 3

Research of developments in music since 1950, including recent 12-tone theory, aleatoric techniques, and electronic music. Strongly Recommended: Strongly Recommended: Graduate standing in Music or permission of instructor.

Music: Performance Activities

MUS 3501 - Large Ensembles: University Chorus

Units: 1

Large ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Field trips may be required. Each large ensemble may be repeated for credit, for a maximum of 12 units. Two hrs act.

MUS 3502 - Large Ensembles: University Orchestra

Units: 1

Large ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Field trips may be required. Each large ensemble may be repeated for credit, for a maximum of 12 units. Two hrs act.

MUS 3504 - East Bay Singers

Units: 1

Major performance ensemble in the tradition of collegiate choir. Music activities are Open to all qualified students by audition. Music majors are required to enroll in one major performance group each quarter of study. Field trips may be required. May be repeated for credit, for a maximum of 12 units. Two hours activity.

MUS 3504 - Large Ensembles: East Bay Singers

Units: 1

Large ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Field trips may be required. Each large ensemble may be repeated for credit, for a maximum of 12 units. Two hrs act.

MUS 3510 - East Bay Jazz Workshop

Units: 1

Major performance ensemble in the tradition of jazz big band. Music activities are Open to all qualified students by audition. Music majors are required to enroll in one major performance group each quarter of study. Field trips may be required. May be repeated for credit, for a maximum of 12 units. Two hours activity.

MUS 3510 - Large Ensembles: East Bay Jazz Workshop

Units: 1

Large ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Field trips may be required. Each large ensemble may be repeated for credit, for a maximum of 12 units. Two hrs act.

MUS 3511 - East Bay Wind Symphony

Units: 1

Major performance ensemble in the tradition of band and wind ensemble. Music activities are Open to all qualified students by audition. Music majors are required to enroll in one major performance group each quarter of study. Field trips may be required. May be repeated for credit, for a maximum of 12 units. Two hours activity.

MUS 3511 - Large Ensembles: East Bay Wind Symphony

Units: 1

Large ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Field trips may be required. Each large ensemble may be repeated for credit, for a maximum of 12 units. Two hrs act.

MUS 3515 - Large Ensembles: Singing Society

Units: 1

Large ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Field trips may be required. Each large ensemble may be repeated for credit, for a maximum of 12 units. Two hrs act.

MUS 3531 - Chamber Ensembles: -Chamber Winds

Units: 1

Chamber ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Repertoire for small and large combinations of winds, brass, and percussion with occasional soloists. Field trips may be required. Each chamber ensemble may be repeated for credit, for a maximum of 6 units per ensemble. Two hrs act.

MUS 3532 - Chamber Ensembles: Wind, Brass, and Percussion Ensembles-Brass Ensemble

Units: 1

Chamber ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Repertoire for small and large combinations of brass instruments with occasional soloists. Field trips may be required. Each chamber ensemble may be repeated for credit, for a maximum of 6 units per ensemble. Two hrs act.

MUS 3533 - Chamber Ensembles: Wind, Brass, and Percussion Ensembles-Trumpet Ensemble

Units: 1

Chamber ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Repertoire for small and large combinations of trumpets with occasional soloists. Field trips may be required. Each chamber ensemble may be repeated for credit, for a maximum of 6 units per ensemble. Two hrs act.

MUS 3534 - Chamber Ensembles: Wind, Brass, and Percussion Ensembles-Trombone Ensemble

Units: 1

Chamber ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Repertoire for small and large combinations of trombones and low brass with occasional

soloists. Field trips may be required. Each chamber ensemble may be repeated for credit, for a maximum of 6 units per ensemble. Two hrs act.

MUS 3535 - Chamber Ensembles: Wind, Brass, and Percussion Ensembles-Percussion Ensemble

Units: 1

Chamber ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Repertoire for small and large combinations of pitched and non-pitched percussion instruments. Field trips may be required. Each chamber ensemble may be repeated for credit, for a maximum of 6 units per ensemble. Two hrs act.

MUS 3536 - Chamber Ensembles: Wind, Brass, and Percussion Ensembles-African Drumming Ensemble

Units: 1

Chamber ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Repertoire for small and large combinations of African drums and percussion instruments. Field trips may be required. Each chamber ensemble may be repeated for credit, for a maximum of 6 units per ensemble. Two hrs act.

MUS 3541 - Chamber Ensembles: String and Keyboard Ensembles-String Ensemble

Units: 1

Chamber ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Repertoire for small and large combinations of bowed, struck and plucked string instruments with occasional soloists. Field trips may be required. Each chamber ensemble may be repeated for credit, for a maximum of 6 units per ensemble. Two hrs act.

MUS 3542 - Chamber Ensembles: String and Keyboard Ensembles-Guitar Ensemble

Units: 1

Chamber ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Repertoire for small and large combinations of guitars with occasional soloists. Field trips may be required. Each chamber ensemble may be repeated for credit, for a maximum of 6 units per ensemble. Two hrs act.

MUS 3543 - Chamber Ensembles: String and Keyboard Ensembles-Piano Ensemble

Units: 1

Chamber ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Repertoire for small and large combinations of keyboard instruments with special attention paid towards works for piano four-hands and two pianos. Field trips may be required. Each chamber ensemble may be repeated for credit, for a maximum of 6 units per ensemble. Two hrs act.

MUS 3550 - Chamber Ensembles: Jazz Combos-Jazz Improvisation Ensemble

Units: 1

Chamber ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Introductory-level jazz ensemble focusing on general improvisation techniques in jazz. Field trips may be required. Each chamber ensemble may be repeated for credit, for a maximum of 6 units per ensemble. Two hrs act.

MUS 3551 - Chamber Ensembles: Jazz Combos-Jazz Standards Ensemble

Units: 1

Chamber ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Jazz ensemble focusing on standard jazz combo repertoire. Field trips may be required. Each chamber ensemble may be repeated for credit, for a maximum of 6 units per ensemble. Two hrs act.

MUS 3552 - Chamber Ensembles: Jazz Combos-Contemporary Jazz Ensemble

Units: 1

Chamber ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Jazz ensemble emphasizing modern, mainstream jazz repertoire. Field trips may be required. Each chamber ensemble may be repeated for credit, for a maximum of 6 units per ensemble. Two hrs act.

MUS 3553 - Chamber Ensembles: Jazz Combos-Blue Note Jazz Ensemble

Units: 1

Chamber ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Small jazz ensemble focusing on post-bop jazz of the 1950's and 1960's. Field trips may be required. Each chamber ensemble may be repeated for credit, for a maximum of 6 units per ensemble. Two hrs act.

MUS 3554 - Chamber Ensembles: Jazz Combos-Latin Jazz Ensemble

Units: 1

Chamber ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Jazz ensemble focusing on Afro-Cuban, Salsa, and Brazilian jazz repertoire. Field trips may be required. Each chamber ensemble may be repeated for credit, for a maximum of 6 units per ensemble. Two hrs act.

MUS 3555 - Chamber Ensembles: Jazz Combos-Jazz Composers Ensemble

Units: 1

Chamber ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Jazz ensemble focusing on the composition and performance of student works for jazz ensemble. Field trips may be required. Each chamber ensemble may be repeated for credit, for a maximum of 6 units per ensemble. Two hrs act.

MUS 3556 - Chamber Ensembles: Jazz Combos-Electric Jazz Ensemble

Units: 1

Chamber ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Jazz ensemble focusing on Fusion, Funk, and World Jazz. Field trips may be required. Each chamber ensemble may be repeated for credit, for a maximum of 6 units per ensemble. Two hrs act.

MUS 3557 - Chamber Ensembles: Jazz Combos-Avant-garde Jazz Ensemble

Units: 1

Chamber ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Jazz ensemble focusing on free improvisation, game pieces, extended improvisation techniques, and other experimental means of composing and performing jazz. Field trips may be required. Each chamber ensemble may be repeated for credit, for a maximum of 6 units per ensemble. Two hrs act.

MUS 3558 - Chamber Ensembles: Jazz Combos-Rhythm Section Ensemble

Units: 1

Chamber ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Jazz ensemble emphasizing rhythmically challenging material such as odd-meter composition, polyrhythmic works, and pieces with frequent and dramatic metric changes. Field trips may be required. Each chamber ensemble may be repeated for credit, for a maximum of 6 units per ensemble. Two hrs act.

MUS 3559 - Chamber Ensembles: Jazz Combos-Sight-reading Ensemble

Units: 1

Chamber ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Jazz ensemble focusing on continual honing of sight-reading abilities through continual practice and performance of works unseen previous to rehearsal. Field trips may be required. Each chamber ensemble may be repeated for credit, for a maximum of 6 units per ensemble. Two hrs act.

MUS 3560 - Chamber Ensembles: Vocal Ensembles-Vocal Repertory Ensemble

Units: 1

Chamber ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Chamber ensemble focusing on repertoire for solo voice and small and large combinations of voices with special attention paid to Art Song and peer review and collaborative assessment of performance practice. Field trips may be required. Each chamber ensemble may be repeated for credit, for a maximum of 6 units per ensemble. Two hrs act.

MUS 3561 - Chamber Ensembles: Vocal Ensembles-Chamber Singers

Units: 1

Chamber ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Small vocal ensemble focusing on repertoire for chamber choir, mixed voices. Field trips may be required. Each chamber ensemble may be repeated for credit, for a maximum of 6 units per ensemble. Two hrs act.

MUS 3562 - Chamber Ensembles: Vocal Ensembles-Jazz Singers

Units: 1

Chamber ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Small vocal ensemble focusing on repertoire for chamber choir, mixed voices, that is drawn from jazz, pop, and world traditions. Field trips may be required. Each chamber ensemble may be repeated for credit, for a maximum of 6 units per ensemble. Two hrs act.

MUS 3570 - Chamber Ensembles: New Music and World Ensembles- Orchestre dB New Music Ensemble

Units: 1

Chamber ensembles are open to all qualified students (determined by audition). Music majors are required to enroll in one major performance group each quarter. Chamber ensemble focusing on repertoire for small and large combinations of string, wind, brass, percussion, vocal, keyboard, and electronic instruments with special attention paid towards the workshop and performance of newly composed student and faculty works. Field trips may be required. Each chamber ensemble may be repeated for credit, for a maximum of 6 units per ensemble. Two hrs act.

Music: Theory

MUS 1027 - Sightsinging I

Units: 1

Development of music reading skills applicable to all instrumental and vocal performance media. Dictation, analysis and singing of melodies and melodic exercises; study and performance of basic rhythmic materials. *Co-requisites: MUS 1031, MUS 1314.* Two hrs. act. MUS 1027-MUS 1029 and MUS 1031-MUS 1033 and MUS 1314-MUS 1316 to be taken concurrently.

MUS 1028 - Sightsinging II

Units: 1

Development of music reading skills applicable to all instrumental and vocal performance media. Dictation, analysis and singing of melodies and melodic exercises; study and performance of basic rhythmic materials. *Prerequisites: MUS 1027, or consent of instructor. Co-requisites: MUS 1032 and MUS 1315.* Two hrs. act. MUS 1027-29 and 1031-33 and 1314-16 to be taken concurrently.

MUS 1029 - Sightsinging III

Units: 1

Development of music reading skills applicable to all instrumental and vocal performance media. Dictation, analysis and singing of melodies and melodic exercises; study and performance of basic rhythmic materials. *Prerequisites: MUS 1028, or consent of instructor. Co-requisites: MUS 1033 and MUS 1316.* Two hrs. act. MUS 1027-MUS 1029 and MUS 1031-MUS 1033 and MUS 1314-MUS 1316 to be taken concurrently.

MUS 1031 - Music Theory I

Units: 4

The integrated study of tonal harmony, part-writing, analysis and ear-training. I. Intensive fundamentals, triads and seventh chords. Each student will take an assessment exam at the beginning of the quarter to determine the level of preparedness in fundamentals. *Co-requisites: MUS 1027 and MUS 1314.* MUS 1027-MUS 1029 and 1031-MUS 1033 and MUS 1314-MUS 1316 to be taken concurrently.

MUS 1032 - Music Theory II

Units: 4

The integrated study of tonal harmony, part-writing, analysis and ear-training. II. Elementary counterpoint, figuration, SATB scoring, elementary instrumentation, and arranging. *Prerequisites: MUS 1027, MUS 1031, MUS 1314. Co-requisites: MUS 1028 and MUS 1315.* MUS 1027-MUS 1029 and MUS 1031-MUS 1033 and MUS 1314-MUS 1316 to be taken concurrently.

MUS 1033 - Music Theory III

Units: 4

The integrated study of tonal harmony, part-writing, analysis and ear-training. III. Harmonization, advanced figuration, chorale harmonization, sequences. *Prerequisites: MUS 1028, MUS 1032, MUS 1315. Co-requisites: MUS 1029 and MUS 1316.* MUS 1027-MUS 1029 and MUS 1031-MUS 1033 and MUS 1314-MUS 1316 to be taken concurrently.

MUS 1085 - Introduction to Audio Production

Units: 4

Application to music composition and recording of fundamental acoustics and psychoacoustics, MIDI, and digital audio workstation (DAW) software. Three hrs. lect.; 2 hrs. act.

MUS 2027 - Sightsinging IV

Units: 1

Skills development in ear training and sight-singing. Includes melodic, harmonic, and rhythmic performance, analysis and dictation. *Prerequisites: MUS 1029, or consent of instructor. Co-requisites: MUS 2031.* Two hrs. act.

MUS 2028 - Sightsinging V

Units: 1

Skills development in ear training and sight-singing. Includes melodic, harmonic, and rhythmic performance, analysis and dictation. *Prerequisites: MUS 2027, or consent of instructor. Co-requisites: MUS 2032.* Two hrs. act.

MUS 2029 - Sightsinging VI

Units: 1

Skills development in ear training and sight-singing. Includes melodic, harmonic, and rhythmic performance, analysis and dictation. *Prerequisites: MUS 2028, or consent of instructor. Co-requisites: MUS 2033.* Two hrs. act.

MUS 2031 - Music Theory IV

Units: 4

IV. Sequences, secondary dominants, tonicization and modulation, phrase and motivic analysis. *Prerequisites: MUS 1029, MUS 1033, MUS 1316. Co-requisites: MUS 2027.*

MUS 2032 - Music Theory V

Units: 4

V. Introduction to form, chromaticism, advanced tonal procedures. *Prerequisites: MUS 2027, MUS 2031. Co-requisites: MUS 2028*

MUS 2033 - Music Theory VI

Units: 4

VI. Twentieth Century music up to the present; extension of tonality; non-tonal music. Analysis and compositional exercises. *Prerequisites: MUS 2028, MUS 2032. Co-requisites: MUS 2029.*

MUS 3034 - Analysis of Contemporary Music

Units: 4

Exploration of various music systems implemented by composers from 1940 forward. Pitch-class set analysis and dissection of the implementation of procedural music systems across genres. *Prerequisites: MUS 2033.*

MUS 3037 - Improvisation Techniques I

Units: 4

Introduction to improvisation techniques for jazz instrumentalists. Use of modes (major & melodic minor), symmetrical scales, and arpeggios in improvisation. Emphasis on the development of an idiomatic jazz style through the transcription and analysis of recorded solos by jazz masters. *Prerequisites: MUS 1033. A-F grading only.*

MUS 3038 - Improvisation Techniques II

Units: 4

Continuation of MUS 3037. Advanced techniques in jazz improvisation. Topics include harmonic superimposition, playing "out", and poly-rhythms and cross-rhythms. Emphasis on the development of an idiomatic jazz style through the transcription and analysis of recorded solos by jazz masters. *Prerequisites: MUS 1033, MUS 3037. A-F grading only.*

MUS 3040 - Jazz Theory & Composition

Units: 4

Study of jazz harmonic theory and composition for small jazz ensembles. Topics include the analysis of standard jazz repertoire and compositions by jazz composers, jazz applications of tonal harmony, reharmonization techniques and chord substitution, and idiomatic song forms. *Prerequisites: MUS 1033. A-F grading only.*

MUS 3051 - Form and Analysis

Units: 4

The study and analysis of music written in traditional forms. *Prerequisites: MUS 2033.*

MUS 3061 - Counterpoint I, II

Units: 4

I. The writing of counterpoint modeled on the style of Palestrina. Additional work modeled on other 16th century composers may be introduced at the discretion of the instructor. Strongly Recommended: Strongly Recommended: MUS 2032.

MUS 3062 - Counterpoint I, II

Units: 4

II. The writing of counterpoint modeled on the style of J. S. Bach. Additional work modeled on other 17th and 18th century composers may be introduced at the discretion of the instructor. Strongly Recommended: Strongly Recommended: MUS 2032.

MUS 3086 - Audio: Sequencing

Units: 4

Using music sequencing software such as Reason, Ableton, and Digital Performer, to run hardware and software synthesizers and samplers in the creation of digital music. Not open to students with credit for MUS 3082. Three hrs. lect., 2 hrs. lab.

MUS 3091 - Music Notation Software

Units: 3

Using music notation software and other publishing pre-press software to produce printed music for publication and performance. Two hrs. lect., 2 hrs. lab.

MUS 4054 - Instrumentation

Units: 4

Study of the instruments of the orchestra and band; scoring for small ensembles; survey of scoring for school orchestra, band, and chorus. *Prerequisites: MUS 2033.*

MUS 4074 - Orchestration I

Units: 4

Scoring and arranging for smaller combinations of Western classical music forces such as string quartet, wind quintet, and other combinations of acoustic instruments in small ensembles. Overview of the development of the orchestra from the baroque to classical periods. *Prerequisites: MUS 2033, MUS 4054. A-F grading only.*

MUS 4075 - Orchestration II

Units: 4

Continuation of MUS 4074. Scoring for larger combinations of Western classical music forces such as string orchestra, wind ensemble, and orchestra. Overview of the development of the orchestra from the romantic period to now. *Prerequisites: MUS 2033, MUS 4074. A-F grading only.*

MUS 4077 - Jazz Arranging for Large Ensemble

Units: 4

Focus on arranging and orchestration techniques for large jazz ensemble. Study of ensemble scores from the jazz masters and the use of doublings, mutes, voicings, upper-structure triads, and linear harmonization to arrange and compose for big band. *Prerequisites: MUS 2033, MUS 3037. A-F grading only.*

Music: Theory: Graduate

MUS 6015 - Analysis of Musical Styles I

Units: 3

Analysis of compositional styles from chant to present-day music. Compositional principles are derived from the music with results then generalized according to composer and period. *Prerequisites: MUS 3034 or consent of instructor.*

MUS 6016 - Analysis of Musical Styles II

Units: 3

Analysis of compositional styles from chant to present-day music. Compositional principles are derived from the music with results then generalized according to composer and period. *Prerequisites: MUS 3034 or consent of instructor.*

Nursing

NURS 2002 - Success in Nursing

Units: 2

Learning strategies for the applied science of nursing. Written and oral communication activities relevant to nursing major courses. *Prerequisites: Departmental permission.* May be repeated two times for credit, for a maximum of 4 units. *CR/NC grading only.*

NURS 2005 - Clinical Pathophysiology

Units: 4

Mechanisms of disease with implications for recognition and clinical management. *Prerequisites: BIOL 2010 (or BIOL 2011) and BIOL 2020 or equivalent.* A-F grading only.

NURS 2010 - Principles of Nutrition and Medical Nutrition Therapy

Units: 4

Functions and sources of nutrients. Health disorders caused by lack or excess of nutrients. Nutritional needs throughout the life cycle. Specialization and career opportunities of nutritionists and dietitians. Concepts of medical nutrition therapy and basis of nutritional assessment. *A-F grading only.*

NURS 2015 - Pharmacology

Units: 3

Introduction to pharmacotherapeutics. *Prerequisites: BIOL 2020, BIOL 2025; NURS 2020.* A-F grading only.

NURS 2020 - Introduction to Contemporary Nursing

Units: 4

Introduction to contemporary issues in nursing. Concepts and principles used in design/delivery of nursing care to promote client adaptation. Examination of nursing as a profession. *Prerequisites: Department permission; BIOL 2010 (or BIOL 2011), BIOL 2020, BIOL 2025; CHEM 1601 (or CHEM 1605), CHEM 1602; COMM 1000 or COMM 1004; ENGL 1001; PHIL 1000 or PHIL 1001 or equivalent; STAT 1000.* *Co-requisites: BIOL 2021, NURS 2022.* A-F grading only.

NURS 2021 - Nursing Support of Community-Based Clients

Units: 2

Provision of nursing support to well clients living in the community. Health screening/assessment, client teaching included. *Prerequisites: Department permission; BIOL 2010 (or BIOL 2011), BIOL 2020, BIOL 2025; CHEM 1601 (or CHEM 1605), CHEM 1602; COMM 1000 or COMM 1004; ENGL 1001; PHIL 1000 or PHIL 1001 or equivalent; STAT 1000.* *Co-requisites: NURS 2020, NURS 2022.* *CR/NC grading only.* Six hrs. lab.

NURS 2022 - Level I Nursing Skills I

Units: 2

Prerequisites: Department permission. *Co-requisites: NURS 2020, NURS 2021.* *CR/NC grading only.* Six hours lab.

NURS 2030 - Nursing Care of Adults I

Units: 4

Nursing care delivery for patients and families experiencing mild to moderate alteration in health/function. Concepts and principles necessary to anticipate, identify, and meet universal biopsychosocial adaptation needs for nursing in healthcare context. *Prerequisites: Department permission; NURS 2010, NURS 2020, NURS 2021, NURS 2022; PSYC 1000 (or PSYC 1001 or PSYC 1005).* *Co-requisites: NURS 2031, NURS 2032.* A-F grading only.

NURS 2031 - Care of Adults I Practicum

Units: 2

Prerequisites: Department permission; NURS 2010, NURS 2020, NURS 2021, NURS 2022; PSYC 1000 (or PSYC 1001). *Co-requisites: NURS 2030, NURS 2032.* *CR/NC grading only.* Six hrs. lab.

NURS 2032 - Basic Physical Assessment

Units: 2

Physical assessment skills necessary to provide professional nursing care. *Prerequisites: Department permission; NURS 2010, NURS 2020, NURS 2021, NURS 2022; PSYC 1000 (or PSYC 1001 or PSYC 1005). Co-requisites: NURS 2030, NURS 2031. CR/NC grading only. Six hrs. lab.*

NURS 2040 - Nursing Care of Adults II

Units: 4

Continuation of Nursing Care of Adults I. Nursing care to support patients and families experiencing mild to moderate alteration in health/function. Theories and principles necessary to anticipate, identify, meet biopsychosocial needs in selected pathophysiologic states. *Prerequisites: Department permission; NURS 2015, NURS 2030, NURS 2031, NURS 2032; SOC 1000 (or SOC 1002) or ANTH 1000 (or ANTH 1002) or ANTH 1300. Co-requisites: NURS 2041, NURS 2042. A-F grading only.*

NURS 2041 - Care of Adults II Practicum

Units: 3

Prerequisites: Department permission; NURS 2015, NURS 2030, NURS 2031, NURS 2032; SOC 1000 (or SOC 1002) or ANTH 1000 or ANTH 1300. Co-requisites: NURS 2040, NURS 2042. CR/NC grading only. Nine hrs. lab.

NURS 2042 - Level I Nursing Skills II

Units: 1

Prerequisites: Department permission; NURS 2015, NURS 2030, NURS 2031, NURS 2032; SOC 1000 (or SOC 1002) or ANTH 1000 or ANTH 1300. Co-requisites: NURS 2040, NURS 2041. CR/NC grading only. Three hrs. lab.

NURS 3001 - Level II Nursing Skills I

Units: 1

Prerequisites: Department permission; NURS 2005, NURS 2010, NURS 2015, NURS 2040, NURS 2041, NURS 2042. A-F grading only. Three hrs. lab.

NURS 3002 - Level II Nursing Skills II

Units: 1

Prerequisites: Department permission; NURS 3001 and NURS 3201. A-F grading only. Three hrs. lab.

NURS 3003 - Level II Nursing Skills III

Units: 1

Prerequisites: Department permission; NURS 3002. A-F grading only. Three hrs. lab.

NURS 3200 - Current Issues in Professional Nursing

Units: 1

Discussion and presentation of a variety of current issues in nursing. May include: violence in the workplace, international opportunities in research and service, current research projects, strategies for job searches. *Prerequisites: Completion of Level I Nursing curriculum. Co-requisites: Concurrently registered as a Level II, III or RN-BSN student in the CSUEB Nursing Program. May be repeated three times for credit for a maximum of 4 units. CR/NC grading only.*

NURS 3201 - Patients and Families with Complex Needs

Units: 4

Concepts and principles from nursing and behavioral sciences applied to care of acutely ill patients and their families. Concepts and theories addressed include role, adaptation, communication, teaching/learning, systems and research. *Prerequisites: NURS 2040, NURS 2041, and NURS 2042; HDEV 3800 or PSYC 4420; department permission.* A-F grading only.

NURS 3202 - Nursing Leadership

Units: 4

Integration of traditional leadership and management theory with contemporary healthcare issues, nursing trends, and practice applications. May be taken concurrently with NURS 3402-NURS 3413 or with NURS 3509 for Nursing, RN Advanced Placement Option, B.S. *Prerequisites: Department permission; NURS 3001, NURS 3002, NURS 3201, NURS 3401.* A-F grading only.

NURS 3401 - Legal Responsibilities of Health Care Providers

Units: 2

Overview of American legislative and judicial system and its effect on consumer health care. The professional nurse is viewed as an advocate of clients as consumers of health care. *Prerequisites: NURS 3201; department permission.* A-F grading only.

NURS 3402 - Nursing Care of Adults III

Units: 1

Nursing care of patients with complex illness requiring surgery. Principles from nursing, natural, and behavioral sciences to anticipate, identify, and meet nursing needs of patients and their families. May be taken concurrently with NURS 3201. *Prerequisites: NURS 2005, NURS 2010, NURS 2015, NURS 2040, NURS 2041, NURS 2042, NURS 3201; department permission.* A-F grading only.

NURS 3403 - Nursing Care of Adults III Practice

Units: 2

May be taken concurrently with NURS 3201. *Prerequisites: NURS 2005, NURS 2010, NURS 2015, NURS 2040, NURS 2041, NURS 2042, NURS 3201; department permission. Co-requisites: NURS 3402. CR/NC grading only. Six hrs. lab.*

NURS 3404 - Care of Childbearing Families

Units: 1

Nursing care of families during childbearing including normal and high-risk conditions. Principles from nursing, natural, and behavioral sciences to anticipate, identify, and meet nursing needs. May be taken concurrently with NURS 3201. *Prerequisites: NURS 2005, NURS 2010, NURS 2015, NURS 2040, NURS 2041, NURS 2042, NURS 3201; department permission.* A-F grading only.

NURS 3405 - Childbearing Family Practice

Units: 2

May be taken concurrently with NURS 3201. *Prerequisites: NURS 2005, NURS 2010, NURS 2015, NURS 2040, NURS 2041, NURS 2042, NURS 3201; department permission. Co-requisites: NURS 3404. CR/NC grading only. Six hrs. lab.*

NURS 3406 - Care of Clients with Psychiatric/Mental Health Needs

Units: 1

Theories of human behavior and the purposeful use of self provide a theoretical framework for psychiatric and mental health care of clients and their families. May be taken concurrently with NURS 3201. *Prerequisites: NURS 2005, NURS 2010, NURS 2015, NURS 2040, NURS 2041, NURS 2042, NURS 3201; department permission.* A-F grading only.

NURS 3407 - Psychiatric/Mental Health Nursing Practicum

Units: 2

May be taken concurrently with NURS 3201. *Prerequisites: NURS 2005, NURS 2010, NURS 2015, NURS 2040, NURS 2041, NURS 2042, NURS 3201; department permission.* *Co-requisites: NURS 3406.* CR/NC grading only. Six hrs. lab.

NURS 3408 - Nursing Care of Childrearing Families

Units: 1

Care of families and children with emphasis on acute illness, health promotion, and growth and development. Physiologic, and psychosocial aspects of care are addressed. May be taken concurrently with NURS 3201. *Prerequisites: NURS 2005, NURS 2010, NURS 2015, NURS 2040, NURS 2041, NURS 2042, NURS 3201; department permission.* A-F grading only.

NURS 3409 - Childrearing Family Practice

Units: 2

May be taken concurrently with NURS 3201. *Prerequisites: NURS 2005, NURS 2010, NURS 2015, NURS 2040, NURS 2041, NURS 2042, NURS 3201; department permission.* *Co-requisites: NURS 3408.* Six hrs. lab.

NURS 3410 - Nursing Care of Adults IV

Units: 1

Nursing care of patients with acute, complex illness requiring medical intervention. Principles from nursing, natural, and behavioral sciences to anticipate, identify, and meet nursing needs of patients and their families. May be taken concurrently with NURS 3201. *Prerequisites: NURS 2005, NURS 2010, NURS 2015, NURS 2040, NURS 2041, NURS 2042, NURS 3201; department permission.* A-F grading only.

NURS 3411 - Nursing Care of Adults IV Practice

Units: 2

May be taken concurrently with NURS 3201. *Prerequisites: NURS 2005, NURS 2010, NURS 2015, NURS 2040, NURS 2041, NURS 2042, NURS 3201; department permission.* *Co-requisites: NURS 3410.* CR/NC grading only. Six hrs. lab.

NURS 3412 - Nursing Care of Elder Adults

Units: 1

Nursing care of elders with acute, complex illness. Principles from nursing, natural, and behavioral sciences to anticipate, identify, and meet nursing needs of patients and their families. May be taken concurrently with NURS 3201. *Prerequisites: NURS 2005, NURS 2010, NURS 2015, NURS 2040, NURS 2041, NURS 2042, NURS 3201; department permission.* A-F grading only.

NURS 3413 - Care of Elder Adults Practice

Units: 2

May be taken concurrently with NURS 3201. *Prerequisites: NURS 2005, NURS 2010, NURS 2015, NURS 2040, NURS 2041, NURS 2042, NURS 3201; department permission. Co-requisites: NURS 3412. CR/NC grading only. Six hrs. lab.*

NURS 3502 - Continuum of Care

Units: 2

Models of nursing case management. Facilitation of safe, efficient transitions across the continuum of care. Consideration of constraints imposed by healthcare payors. Nursing interventions of anticipation, planning, teaching and advocacy. *Prerequisites: Department permission; NURS 2005, NURS 2010, NURS 3201. A-F grading only.*

NURS 3503 - Advanced Physical Assessment

Units: 3

Physical assessment of adults for experienced Registered Nurses. *Prerequisites: Department permission required. Open only to R.N. students enrolled in the Nursing major. A-F grading only.*

NURS 3505 - Advanced Principles I

Units: 4

Advanced concepts of professional role, systems, change, and academic writing. Examination of evidence based practice resources. *Prerequisites: Department permission; BIOL 2010 (or BIOL 2011), BIOL 2020, BIOL 2025; CHEM 1601 (or CHEM 1605), CHEM 1602; COMM 1000 or COMM 1004; ENGL 1001; PHIL 1000 or PHIL 1001 or equivalent; STAT 1000. A-F grading only. Must have current California R.N. Licensure. Open only to R.N. students enrolled in the Nursing major.*

NURS 3507 - Advanced Principles II

Units: 4

Continuum of care as it applies to patients with complex illness. Adaptation and nursing process incorporated into nursing interventions to facilitate patient transitions. *Prerequisites: NURS 3505. Open only to R.N. students enrolled in the Nursing major. A-F grading only.*

NURS 3509 - Advanced Principles III

Units: 4

Effects of hospitalization on patients and families. Exploration of nursing interventions related to theories of aging and illness role. Nursing research critique. *Prerequisites: NURS 3507. Open only to R.N. students enrolled in the Nursing major. A-F grading only.*

NURS 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least a 2.0 GPA; department approval of activity. May be repeated for credit, for a maximum of 8 units. Not for credit in the Nursing major. CR/NC grading only.*

NURS 3999 - Issues in Nursing

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in nursing. May be repeated for credit when content varies, for a maximum of 8 units.

NURS 4203 - Research Utilization

Units: 2

Critique of quantitative and qualitative nursing research with implications for clinical practice. Use of evidence-based practice resources to facilitate research utilization. *Prerequisites: Department permission; all 3000-level NURS courses; RN Advanced Placement option--NURS 3509. A-F grading only.*

NURS 4206 - Nursing Care of the Adult with Critical Illness

Units: 2

Nursing care of critically ill adult patients. Exploration of advanced therapeutic interventions and principles of critical thinking skills in managing patients with multi-system disorders. *Prerequisites: Completion of NURS 2005 with a grade of B or better and consent of instructor. Co-requisites: Concurrently registered as a Level III or RN-BSN student in the CSUEB Nursing Program.*

NURS 4207 - Principles of Community Health Nursing

Units: 2

Community-oriented, population-focused approaches to health promotion, disease prevention. Core functions of public health and nursing applied to individuals, aggregates and communities at risk for development of health problems. *Prerequisites: Department permission; all 3000-level Nursing courses; RN Advanced Placement option-- NURS 3509. A-F grading only.*

NURS 4208 - Practicum of Community Health Nursing

Units: 4

Prerequisites: Department permission; all 3000-level Nursing courses; RN Advanced Placement option-NURS 3509. Co-requisites: NURS 4207. Open only to students enrolled in the Nursing major. CR/NC grading only.

NURS 4301 - Preceptorship Seminar

Units: 2

Preceptored course that promotes professional role transition through guided independence in professional nursing practice. Leadership/management concepts applied to contemporary professional practice issues. *Prerequisites: Department permission; all 3000-level nursing courses; RN Advanced Placement option--NURS 3509. A-F grading only.*

NURS 4302 - Preceptorship Practicum

Units: 8

Prerequisites: Department permission; all 3000-level nursing courses; RN Advanced Placement option--NURS 3509. Co-requisites: NURS 4301. Open only to students enrolled in the Nursing major. CR/NC grading only.

NURS 4305 - Preceptorship Practicum for the RN-BSN Student

Units: 4

Prerequisites: Department permission; NURS 3509. Co-requisites: NURS 4301. Open only to RN-BSN students. CR/NC grading only. Twelve hrs. act.

NURS 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

Philosophy

PHIL 1000 - Workshop in Clear Thinking

Units: 4

Development of clarity and focus in thinking, with attention to rigor, modes of explanation, validity of reasoning, etc.

PHIL 1001 - Introduction to Logic

Units: 4

Beginning study of the forms of valid inference, including informal fallacies, syllogistic logic and symbolic logic.

PHIL 1005 - Viewing Diversity

Units: 4

Introduction to the philosophical treatment of diversity and race. Topics may include the social contract, the social construction of race, reparations, the effects of racial classification, social inequality, the relationship of contemporary social and political issues to race.

PHIL 1102 - Issues in Environmental Ethics

Units: 4

Critical examination of ethical issues in environmental philosophy. Topics may include: the impact of human activity on environmental systems, climate change, loss of biodiversity, sustainable practices, and intergenerational justice. Not open to students with credit for PHIL 1103 or PHIL 1104.

PHIL 1103 - Science, Ethics, and Technology

Units: 4

The ethical implications of various technologies, such as biotechnology, medical technologies, environmental technologies, and informational technologies. Not open to students with credit for PHIL 1102 or PHIL 1104.

PHIL 1104 - The Philosophy of Environmental Science and Policy

Units: 4

Study of issues related to the morality and justification of environmental science as a source of knowledge and guide to human action. Topics include: scientific disagreement, whose interests should concern us, and what should influence our evaluation of government policies. Not open to students with credit for PHIL 1102 or PHIL 1103.

PHIL 1201 - Introduction to Ancient Philosophy

Units: 4

Introduction to ancient philosophy and the origin of Western philosophy through primary texts. Topics may include the good life, mythology, the natural world, justice, knowledge, and reality.

PHIL 1302 - Philosophy of Self and Society

Units: 4

Overview of Western social and political philosophy including feminist critiques and multicultural perspectives. Discussion of human nature, the good life, political economy, rights, justice, power, and oppression. Schools of thought include classical liberalism, libertarianism, socialism, communitarianism, and pragmatism.

PHIL 1303 - Introduction to the Philosophy of Art

Units: 4

Introduction to aesthetics through artistic forms such as music, visual art, and literature. Topics may include expression, representation, and creativity, as well as questions exploring what constitutes a work of art and the role of the artist.

PHIL 1401 - Religions of the World

Units: 4

Comparative study of religions from around the world, such as Hinduism, Buddhism, Taoism, Judaism, Christianity and Islam.

PHIL 2001 - Introduction to Philosophy

Units: 4

Major themes, thinkers and methods in philosophy. Topics include the history of philosophy, the nature of philosophical questioning, God, reality, truth and the self.

PHIL 2002 - Introduction to Ethics

Units: 4

Introduction to philosophical ethics. Topics include major ethical theories, virtue, vice, evil, character, moral education and relativism. Impact of cultural diversity on ethical discourse.

PHIL 2003 - Introduction to Judaism, Christianity, and Islam

Units: 4

Covers the three Abrahamic faiths: Judaism, Christianity, and Islam. Students will learn about each tradition's historical development and the specific beliefs of each, in addition to the relationships between these faiths and the sources of conflict.

PHIL 2040 - Early Modern World Philosophies

Units: 4

Evolution of religious and philosophical traditions of early modern Europe, Middle East, and Asia. Impact of Islam on Judeo-Christian thought; philosophical debates regarding conquest and colonization of the Americas; changing perspectives on race and gender; the Enlightenment in global perspective.

PHIL 2605 - Introduction to Asian Religion

Units: 4

Introduction to Buddhism as it has appeared in India, Southeast Asia, and Japan within the context of related religions including Hinduism, Shinto and the religions of China. Not open to students with credit for PHIL 1605 or PHIL 3403.

PHIL 3002 - Modern Logic

Units: 4

Advanced course in symbolic logic. Students without a mathematical background are encouraged to first take PHIL 1001.

PHIL 3010 - Critical Legal Reasoning

Units: 4

Development of ability to think clearly and rationally with focus on legal reasoning. Argument by analogy, use of precedent, interpretation of court opinions, and LSAT preparation.

PHIL 3100 - Ethics

Units: 4

Major theories about ethics or morality and their relation to different social systems, institutions and cultures of the world.

PHIL 3151 - Environmental Ethics

Units: 4

Philosophical conceptions of nature and the environment, and human responsibilities towards it, drawn from different historical and cultural traditions.

PHIL 3152 - Biomedical Ethics

Units: 4

Ethical issues in biology and medicine, such as euthanasia, abortion, truth-telling, genetic engineering, cloning, distribution of medical resources.

PHIL 3153 - Biology and Ethics

Units: 4

Conceptual and ethical issues arising from new developments in biology. Topics may include cloning, genetic engineering, biodiversity, the evolution/creation debate. *Satisfies GE Area: C4*

PHIL 3161 - Philosophy and Sex

Units: 4

A philosophical examination of conceptual and ethical issues raised by sexuality and sexual love. Possible topics include love and sexuality, promiscuity, prostitution, adultery, homosexuality, sexual harassment, pornography, and same-sex marriage.

PHIL 3201 - Aesthetics

Units: 4

Theories of art, such as imitation, formalism and expressionism; the contrast between representational and abstract art.

PHIL 3216 - Philosophy and Science Fiction

Units: 4

Philosophical views about topics contained implicitly in science fiction writing and film.

PHIL 3230 - Art and Philosophy of the East

Units: 4

An interdisciplinary investigation of the relationship between art and philosophy of Asia, with particular emphasis on Hinduism and Buddhism. Team taught by faculty from the Art and Philosophy departments. Cross-listed ART 3230.

PHIL 3301 - Theory of Knowledge

Units: 4

An exploration of such issues as skepticism, relativism, truth, and the nature of understanding. May be repeated once for credit when content varies, for a maximum of 8 units.

PHIL 3305 - Fundamental Questions: Self, Nature, and God

Units: 4

Topics such as the mind-body problem, freedom versus determinism, and the nature of truth, faith, and reason.

PHIL 3311 - Metaphysics

Units: 4

An exploration of the nature of matter, mind, space, time, truth, and the real. May be repeated once for credit when content varies, for a maximum of 8 units.

PHIL 3321 - Philosophy of the Human Sciences

Units: 4

Philosophical study of theories, methods and problems in the social and behavioral sciences. May be repeated once for credit when content varies, for a maximum of 8 units.

PHIL 3322 - Philosophy of Language

Units: 4

An exploration of fundamental issues concerning language and discourse, such as truth, communication, meaning, representation, understanding, metaphor, and irony.

PHIL 3332 - Philosophy of Science

Units: 4

The nature of scientific explanation, scientific methods, and conceptual revolutions in science. How to distinguish between science, non-science, and pseudoscience. Discussion of whether the scientific method is a superior and more objective means of determining truth, as compared to religion and other systems of thought.

PHIL 3335 - Science, Technology and Values

Units: 4

Nature of scientific reasoning and its relation to technology. Historical development of modern technology. Examples of technological systems: communications, data processing, materials, energy generation. Impact on the environment and on human society. Relation to moral reasoning. Cross-listed SCI 3335.

PHIL 3341 - Philosophy of Cognition and Artificial Intelligence

Units: 4

Philosophical study of the nature of cognition and of human and machine intelligence. Explores such questions as: "What is thinking?" "What is intelligence?" "Can computers understand ordinary language?" Recent trends and prospects of the quest for truly intelligent machines.

PHIL 3344 - Science and Religion

Units: 4

Nature of science and of religion. Apparent conflict between science, religion, and magical thinking. Distinction between facts and values. Discussion of issues such as whether creationism and intelligent design are viable alternatives to the theory of evolution.

PHIL 3400 - Philosophy of Religion

Units: 4

Philosophical issues such as the existence of God, the problem of evil, the paradox of free will, the nature of religious experience and mysticism. May be repeated once for credit when content varies, for a maximum of 8 units.

PHIL 3401 - Contemporary Religious Thinkers

Units: 4

The religious philosophies of one or more major thinkers of the Twentieth Century from different cultures or religious traditions of the world. May be repeated once for credit when content varies, for a maximum of 8 units.

PHIL 3403 - Religions of the East

Units: 4

Survey of Eastern religious thought and practice as expressed in the traditions of Confucianism, Taoism, Hinduism, Buddhism, and others. Not open to students with credit for PHIL 1605 or PHIL 2605.

PHIL 3404 - Mysticism

Units: 4

Survey of mysticism in religions including Judaism, Christianity, Islam, Hinduism, Buddhism, and Taoism. Readings may include works from William James, Rudolph Otto, Carl Jung, Stephen Katz, and Walter Stace, and mystical texts from world religions.

PHIL 3410 - Comparative Themes in Eastern and Western Philosophy

Units: 4

Critical and comparative study of themes from Western philosophy and from Indian, Chinese and other Eastern philosophies. May be repeated once for credit when content varies, for a maximum of 8 units.

PHIL 3411 - Judaism

Units: 4

Study of Judaism, its beliefs and practices; Jewish identity through its history and evolution; including readings from the Hebrew Bible, the Talmud, Kabbalah, and other core Jewish texts.

PHIL 3417 - Islam

Units: 4

Study of Islam, its beliefs and practices; history and evolution, including readings from the Quran, the Hadith, and other core Islamic texts.

PHIL 3421 - Atheism, Agnosticism, and Theism

Units: 4

Philosophical examination of atheism, agnosticism, belief in God, and the reasons, if any, for these three positions. Topics may also include morality, humanism, nihilism, science and religion, the meaning of life, and the nature of spirituality.

PHIL 3430 - The Bible in Film

Units: 4

Introduction to biblical themes and how these themes are variously interpreted within both Judaism and Christianity, and in popular culture and film. Students will watch films depicting biblical stories, discussing the ways they relate to actual biblical accounts.

PHIL 3431 - Cults, New Religious Movements

Units: 4

Introduction to many new religions including Scientology, Wicca, and the Peoples' Temple. Students will learn their origins and how they grow and perpetuate their beliefs. Definitions of "cults" and characteristics of members and leaders are also covered.

PHIL 3432 - Religion, Monsters, and Horror

Units: 4

Examination of monsters as they appear in the world's religions. Discussion of the nature of evil, the fear of death, and the experience of the uncanny. References include religious scriptures, folklore, and popular culture.

PHIL 3433 - Views of the Afterlife

Units: 4

Overview of the beliefs in life after death found in the world's religions. Examination of the experiences of those who feel they have had a brush with the dead or with death itself.

PHIL 3502 - Social and Political Philosophy

Units: 4

Intensive study of the philosophical theories underlying or justifying public policy issues, such as individual freedom and government protection of the rights of others; freedom of speech and religious, racial or sexual prejudice; affirmative action and reverse discrimination; and violence, personal responsibility and the roots of social injustice.

PHIL 3503 - Philosophy of Law

Units: 4

Introduction to the main schools of jurisprudence and legal philosophy. Cross-listed POSC 3503.

PHIL 3510 - Human Rights and Social Justice: Cultural Groups and Women in the U.S.

Units: 4

Philosophical perspectives on human rights and social justice as they apply to the lived experiences of cultural groups and women in the U.S.

PHIL 3511 - Philosophy of Human Rights and Global Justice

Units: 4

Explores human rights theory and its global application from a philosophical perspective. Considers whether the following concepts can be applied globally: the nature of rights, individualism, liberalism, the social contract, cosmopolitanism, postmodernity, multiculturalism, materialism, and the nature of power.

PHIL 3515 - Race and Social Justice

Units: 4

A philosophical examination of race, racism, racial identity and experience, through the narratives of U.S. cultural groups. Possible topics include race as an epistemological and ethical category, racism, racial identity formation, and how to secure social justice.

PHIL 3543 - Evil

Units: 4

Survey of traditional and contemporary philosophical debates on the nature, origin, and existence of evil. Topics may include cruelty, genocide, torture, war, slavery.

PHIL 3560 - Business and Professional Ethics

Units: 4

Team-taught by a philosopher and a social scientist. Explores current ethical issues in business and other professions: preferential hiring vs. equal opportunity, environmental regulation vs. property rights, truthfulness in business communications, economic efficiency vs. social responsibility. Cross-listed MGMT 3560.

PHIL 3601 - Ancient and Medieval Philosophy

Units: 4

Western philosophy from the ancient Greeks (including Socrates, Plato and Aristotle) through the philosophers and theologians of the Middle Ages (including St. Augustine and St. Thomas Aquinas).

PHIL 3602 - Modern Philosophy

Units: 4

Seventeenth and eighteenth century Western philosophy, especially rationalism (Descartes, Spinoza, Leibniz) and empiricism (Locke, Berkeley, Hume).

PHIL 3603 - Thinkers of the Enlightenment

Units: 4

Themes stemming from the Enlightenment such as autonomy, critique, and idealism in philosophers from Kant to Hegel.

PHIL 3604 - Roots of Contemporary Philosophy

Units: 4

Study of one or more twentieth century philosophical traditions, such as logical positivism, analytic philosophy (including Wittgenstein), pragmatism, existentialism, phenomenology, process philosophy, the Frankfurt School. May be repeated once for credit when content varies, for a maximum of 8 units.

PHIL 3605 - Studies in Contemporary Philosophy

Units: 4

Various figures or topics in contemporary philosophy. May be repeated once for credit when content varies, for a maximum of 8 units.

PHIL 3701 - Philosophy of Education

Units: 4

Philosophical examination of educational theories and of their applications in various cultural and social contexts.

PHIL 3720 - Feminist Philosophy

Units: 4

Major themes, theories, and different schools of feminist philosophy; the influences of Marxism, psychoanalysis, existential phenomenology, postmodernism, and theories of difference, with special reference to American feminist thought.

PHIL 3721 - African-American Philosophical Perspectives

Units: 4

A philosophical examination of social, cultural, and political issues relating to African-Americans primarily from the perspective of African-American philosophers. Topics, both historical and contemporary, may include alienation, self-respect, and black feminist thought. Cross-listed ES 3721.

PHIL 3925 - Contemporary Ethical Issues

Units: 4

An examination of ethics as applied to issues of current concern. May include discussion of abortion, affirmative action, animal rights, euthanasia, torture, and the death penalty.

PHIL 3999 - Issues in Philosophy

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in philosophy. May be repeated once for credit when content varies, for a maximum of 8 units.

PHIL 4606 - Seminar in Philosophy

Units: 4

Intensive study of an individual philosopher, school, movement or problem in philosophy.

PHIL 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

Physics

PHYS 1001 - General Physics: Newtonian Mechanics and Oscillations

Units: 5

All major fields of physics are covered in this sequence. This sequence is designed for physics, physical science, Geology, B.S., and Chemistry, B.S. majors. *Prerequisite or Co-requisite: MATH 1304, MATH 1305, MATH 2304. Each course is a prerequisite of the one following.* Four hrs. lect., 3 hrs. lab., each

PHYS 1002 - General Physics: Thermodynamics and Optics

Units: 5

All major fields of physics are covered in this sequence. This sequence is designed for physics, physical science, Geology, B.S., and Chemistry, B.S. majors. *Prerequisite or Co-requisite: MATH 1304, MATH 1305, MATH 2304. Each course is a prerequisite of the one following.* Four hrs. lect., 3 hrs. lab., each

PHYS 1003 - General Physics: Electromagnetism

Units: 5

All major fields of physics are covered in this sequence. This sequence is designed for physics, physical science, Geology, B.S., and Chemistry, B.S. majors. *Prerequisite or Co-requisite: MATH 1304, MATH 1305, MATH 2304. Each course is a prerequisite of the one following.* Four hrs. lect., 3 hrs. lab., each

PHYS 1021 - General Physics Supplemental Instruction

Units: 0.5

Student-centered discussion and problem-solving. Designed to promote understanding of key concepts and enhance student success in the concurrent physics course (PHYS 1001). *Co-requisites: PHYS 1001.* Not for credit in PHYS major. *CR/NC grading only.* 1 hr. act

PHYS 1022 - General Physics Supplemental Instruction

Units: 0.5

Student-centered discussion and problem-solving. Designed to promote understanding of key concepts and enhance student success in the concurrent physics course (PHYS 1002). *Co-requisites: PHYS 1002.* Not for credit in PHYS major. *CR/NC grading only.* 1 hr. act.

PHYS 1023 - General Physics Supplemental Instruction

Units: 0.5

Student-centered discussion and problem-solving. Designed to promote understanding of key concepts and enhance student success in the concurrent physics course (PHYS 1003). *Co-requisites: PHYS 1003.* Not for credit in PHYS major. *CR/NC grading only.* 1 hr. act.

PHYS 1200 - Behind the Music

Units: 4

This course offers a basic introduction to the physical properties of sound waves. The focus will be on developing a scientific framework in which to understand how different musical instruments produce a variety of sounds. Not for credit in Physics major.

PHYS 1410 - Physics for Future Leaders

Units: 4

Essential physics to be president, politician, lawyer, football coach, or any other profession. Provides information required to make an informed decision regarding issues that may have technical components. Topics include energy, radioactivity, fission, fusion, spy satellites, and medical imaging. Not for Physics major/minor credit. *Satisfies GE Area: B1, Physical sciences; B5, Science elective.*

PHYS 1500 - How Things Work

Units: 4

A conceptual look at how popular and common things work, what they mean in an everyday way, and how they all fit together in one working unit. Not open to students with credit for PHYS 1700. Not for credit in Physics major.

PHYS 1700 - Elementary Physics

Units: 4

A non-mathematical survey of the basic physical laws (rules) of nature with emphasis on the origin, meaning, significance, and limitations of these laws. Topical areas include mechanics, wave motion, electricity and magnetism, heat and thermodynamics, relativity, quantum theory, and elementary particle theory. Not open to students with credit for PHYS 1500. Not for credit in Physics major.

PHYS 1780 - Elementary Physics Laboratory

Units: 1

A lab designed to accompany PHYS 1700 and to introduce students to some equipment used in physics. The experiments are hands-on activities in mechanics, wave motion and sound, temperature and heat, electricity, light, and radioactivity. Not for credit in Physics major. Three hrs. lab.

PHYS 1800 - Astronomy

Units: 4

A descriptive survey of astronomy, astrophysics, and cosmology. Emphasis is on the physical nature and evolution of galaxies, stars, and planets. Not open to students with credit for PHYS 1600. Not for credit in Physics major.

PHYS 1810 - Astronomy of Ancient Cultures

Units: 4

Exploration of the astronomical techniques, tools, and theories used by ancient cultures from around the world to understand the sky. Projects and discussions investigate the astronomy, cosmology, and timekeeping practices of ancient people (such as Aztecs, Mayans, Native Americans, Chinese, Greeks, and Egyptians). Connections to the modern understanding of astronomy and cosmology are drawn throughout the course. Not for Physics major/minor credit. *Satisfies GE Area: B1, Physical sciences; B5, Science elective.*

PHYS 1880 - Astronomy Laboratory

Units: 1

A lab designed to accompany PHYS 1800 and PHYS 3700. Experiments are hands-on activities involving positions and motions of the moon, planets, and stars. Some night observations are included. Not for credit in Physics major. Three hrs. lab.

PHYS 2004 - General Physics

Units: 5

A continuation of the General Physics sequence (PHYS 1001, PHYS 1002, PHYS 1003) focusing on modern physics: relativity, quantum mechanics, atomic and molecular physics, nuclear and particle physics. Course is a bridge to upper division work in the sciences, and special emphasis is placed on advanced mathematical techniques and problem-solving skills. *Prerequisites: MATH 2304 and PHYS 1003.* Four hrs. lect., 3 hrs. lab.

PHYS 2005 - The Science of Energy

Units: 4

A descriptive course covering energy resources, production, and consumption in the 21st century. Energy input and output of physical systems such as household appliances and modes of transportation. Not for credit in Physics major.

PHYS 2701 - Introductory Physics: Force, Mass and Motion

Units: 4

A three-quarter sequence in general physics, designed primarily for students taking the B.S. biological sciences (including pre-professional students), Chemistry, B.A., and geology or for non-science majors requiring a good foundation in physics. Knowledge of algebra and trigonometry required. For students who are not majoring in physics. *Prerequisites: Trigonometry or MATH 1300.* Not for credit in Physics major. Three hrs. lect., 3 hrs. lab each.

PHYS 2702 - Introductory Physics: Heat, Sound, Electricity and Magnetism

Units: 4

A three-quarter sequence in general physics, designed primarily for students taking the B.S. biological sciences (including pre-professional students), Chemistry, B.A., and geology or for non-science majors requiring a good foundation in physics. Knowledge of algebra and trigonometry required. For students who are not majoring in physics. *Prerequisites: PHYS 2701.* Not for credit in Physics major. Three hrs. lect., 3 hrs. lab each.

PHYS 2703 - Introductory Physics: Light and Modern Physics

Units: 4

A three-quarter sequence in general physics, designed primarily for students taking the B.S. biological sciences (including pre-professional students), Chemistry, B.A., and geology or for non-science majors requiring a good foundation in physics. Knowledge of algebra and trigonometry required. For students who are not majoring in physics. *Prerequisites: PHYS 2702.* Not for credit in Physics major. Three hrs. lect., 3 hrs. lab each.

PHYS 2711 - Introductory Physics Supplemental Instruction

Units: 0.5

Student-centered discussion and problem-solving. Designed to promote understanding of key concepts and enhance student success in the concurrent physics course (PHYS 2701). *Co-requisites: PHYS 2701.* Not for credit in PHYS major. *CR/NC grading only.* 1 hr. act.

PHYS 2712 - Introductory Physics Supplemental Instruction

Units: 0.5

Student-centered discussion and problem-solving. Designed to promote understanding of key concepts and enhance student success in the concurrent physics course (PHYS 2702). *Co-requisites: PHYS 2702*. Not for credit in PHYS major. *CR/NC grading only*. 1 hr. act.

PHYS 2713 - Introductory Physics Supplemental Instruction

Units: 0.5

Student-centered discussion and problem-solving. Designed to promote understanding of key concepts and enhance student success in the concurrent physics course (PHYS 2703). *Co-requisites: PHYS 2703*. Not for credit in PHYS major. *CR/NC grading only*. 1 hr. act.

PHYS 3011 - Foundational Physics

Units: 4

Covers the foundational areas of physics including motion, forces, electricity, magnetism, thermodynamics, and atomic and nuclear physics. Focuses on the California State Science Standards and prepares students to teach middle school physical science. *Prerequisites: PHYS 1700 and PHYS 1780. Recommendation: Concurrent enrollment in PHYS 3012*. Not for physics major or minor credit.

PHYS 3012 - Foundational Physics Laboratory

Units: 1

Laboratory course which supplements the Foundational Physics lecture, PHYS 3011. Focuses on the California State Science Standards and prepares students to teach middle school physical science. *Prerequisites: PHYS 1700 and PHYS 1780. Co-requisites: Prior or concurrent enrollment in PHYS 3011, or equivalent*. Not for physics major or minor credit. Three hrs. lab.

PHYS 3080 - Physics Hands-on Laboratory

Units: 2

Opportunity to work with elementary and middle school students in a science teaching/learning environment. Hands-on lessons provide early teaching experience in science for undergraduates exploring teaching as a career. *Prerequisites: PHYS 1500, PHYS 1700, PHYS 1001, or PHYS 2701; or consent of Instructor*. 1 hour Lecture/ 3 hours Lab. *Satisfies GE Area: B6*.

PHYS 3101 - Analytic Mechanics I

Units: 3

Review of Newtonian mechanics. Hamilton's Principle. Lagrangian and Hamiltonian formalisms, with applications. Generalized coordinates. Central forces. *Prerequisites: PHYS 1003*.

PHYS 3102 - Analytic Mechanics II

Units: 3

Particles and rigid bodies. Oscillations and waves. Fluids. *Prerequisites: PHYS 3101 Prerequisite or Co-requisite: MATH 3331*.

PHYS 3151 - Thermal and Statistical Physics I

Units: 3

The laws of thermodynamics, states of matter, kinetic theory, introduction to statistical mechanics. *Prerequisites: PHYS 1003*.

PHYS 3152 - Thermal and Statistical Physics II

Units: 3

Canonical and other ensembles. Quantum gases and phase transitions. *Prerequisites: PHYS 3151 Prerequisite or Co-requisite: MATH 3331.*

PHYS 3180 - Computational Physics

Units: 4

Computer programming and numerical techniques relevant to physics. Data acquisition and analysis. *Prerequisites: PHYS 1003 Prerequisite or Co-requisite: MATH 3331.* Two hrs. lect., 6 hrs. lab.

PHYS 3280 - Electronics

Units: 4

Hands-on introduction to analog and digital circuits and components commonly found in laboratory electronics. *Prerequisites: PHYS 1003 or consent of instructor.* Two hrs. lect., 6 hrs. lab.

PHYS 3281 - Experimental Physics

Units: 4

Experiments in various fields of physics. Experimental design. Computer interfacing. Written and oral reports. Laboratory safety. *Prerequisites: PHYS 3280 or consent of instructor.* Two hrs. lect., 6 hrs. lab.

PHYS 3283 - Advanced Laboratory

Units: 4

Experimental projects, including optical and solid state physics topics. *Prerequisites: PHYS 3280.* May be repeated once for credit with consent of instructor, for a maximum of 8 units. Two hrs. lect., 6 hrs. lab.

PHYS 3301 - Quantum Mechanics I

Units: 3

Introduction to Schrodinger's equation and the mathematical formalisms of quantum mechanics. *Prerequisites: PHYS 1003.*

PHYS 3302 - Quantum Mechanics II

Units: 3

Applications of Schrodinger's equation. Angular momentum. *Prerequisites: PHYS 3301 Prerequisite or Co-requisite: MATH 3331.*

PHYS 3303 - Quantum Mechanics III

Units: 3

Approximation methods and further applications of quantum mechanics. *Prerequisites: PHYS 3302 Prerequisite or Co-requisite: MATH 4361.*

PHYS 3700 - The Big Bang and Other Cosmologies

Units: 4

A descriptive course on the cosmological origin and evolution of the universe. Historical review of cosmological models and discussion of current theories. Stellar and galactic origin and evolution, stellar energy, the early universe, open and closed universes, and the search for extra-terrestrial life.

PHYS 3710 - Solar System Astronomy

Units: 4

Overview of the structure and evolution of the solar system. Topics include the sun, terrestrial and Jovian planets, moons, asteroids, comets, as well as the discovery of extra-solar planets and the resulting impact on our understanding of solar system formation.

PHYS 3720 - Stars and Galaxies

Units: 4

An overview of the universe with emphasis on the study of stars and galaxies. Topics include stars, stellar evolution, black holes, neutron stars, galaxies, and the role of dark matter and dark energy in galaxy formation.

PHYS 3750 - Biophysics Tools in the History of Medical Research

Units: 4

A basic introduction to major biophysics tools invented in the 20th century, how they help to amplify, aggregate and differentiate biological data, and some significant discoveries to which they have contributed. Examples are drawn from diabetes, cardiovascular, and kidney research. Not for credit in Physics major.

PHYS 3875 - Mathematical Physics

Units: 4

See MATH 3875 for course description.

PHYS 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least a 2.0 GPA; departmental approval of activity.* May be repeated for credit, for a maximum of 8 units. A maximum of 4 units will be accepted toward the physics major; a maximum of 2 units will be accepted toward the minor. *CR/NC grading only.*

PHYS 3999 - Issues in Physics

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in physics. May be repeated for credit when content varies, for a maximum of 8 units.

PHYS 4001 - Electromagnetism I

Units: 3

Study of electricity and magnetism leading to Maxwell's equations in vacuum. *Prerequisites: PHYS 1003.*

PHYS 4002 - Electromagnetism II

Units: 3

Materials and boundary value problems. AC circuits. *Prerequisites: PHYS 4001 Prerequisite or Co-requisite: MATH 3331.*

PHYS 4003 - Electromagnetism III

Units: 3

Electromagnetic radiation. Relativity in electromagnetism. *Prerequisites: PHYS 4002 Prerequisite or Co-requisite: MATH 4361.*

PHYS 4250 - Selected Topics

Units: 1-3

Various subjects and projects providing an extension of the physics curriculum. *Prerequisites: PHYS 1003.* May be repeated for credit, for a maximum of 3 units for any combination of PHYS 4250 and 4850.

PHYS 4600 - Solid State

Units: 3

Crystals and bonding. Waves in lattices. Electron gas and energy levels. Semiconductors and superconductors. *Prerequisites: PHYS 3302.*

PHYS 4700 - Modern Optics

Units: 3

Introduction to photonics. Lasers and fibers. Non-linear optics and electro-optics. *Prerequisites: PHYS 4002.*

PHYS 4850 - Undergraduate Research

Units: 1-3

Research leading to a formal report, under the direction of a faculty member. *Co-requisites: PHYS 3281 and PHYS 3283.* May be repeated for credit, for a maximum of 3 units for any combination of PHYS 4250 and 4850. Three to nine hrs. act./lab.

PHYS 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

PHYS 4950 - Physics Capstone

Units: 1

Comprehensive overview and synthesis of undergraduate physics. Must be taken in Spring quarter immediately preceding graduation.

Political Science

POSC 1000 - Introduction to Political Science

Units: 4

Introduction to the study of politics and government, surveying the concepts and approaches of political science.

POSC 1171 - Environmental Politics

Units: 4

The history and present status of the ideologies, interests, movements and understandings that form modern environmental policy and politics.

POSC 1201 - American Political Institutions

Units: 4

Development of political institutions and ideals in the U.S. Key elements of the political system, including the Constitution, Presidency, Congress, Courts, parties, elections, and bureaucracy. Combined with POSC 1202 meets code requirements in U.S. history, U.S. Constitution and California government.

POSC 1202 - Public Policy/California Politics

Units: 4

Issues in American public policy, focusing on contemporary controversies (environment, poverty, etc.) California state and local government. Combined with HIST 1101, HIST 3400, HIST 3540, POSC 1201, POSC 3441, or POSC 3442 meets U.S. History, Constitution and Institutions requirement.

POSC 1500 - Conflict in World Politics

Units: 4

Causes of conflict. Topics include Iraq and Desert Storm, Bosnia, the Middle East, and Third World conflicts. Analysis of foreign aggression, civil war, terrorism, ethnic struggle, nationalism, boundary disputes, military force, sanctions, peacekeeping, mediation, disaster relief, and economic aid.

POSC 2002 - The Golden State? Modern Politics, Economics and Culture in California

Units: 4

Consideration of the political, cultural and economic forces that are changing California. Focus on statewide elections and initiatives on the ballot. May be repeated once for credit when content varies, for a maximum of 8 units.

POSC 3030 - The Study of Political Science

Units: 4

History and assumptions of political science as a field; basic skills and methodology; ethics in politics, administration and law; careers; personal learning goals; portfolios; Library tour.

POSC 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. Prerequisites: at least a 2.0 GPA; departmental approval of activity. May be repeated for credit, for a maximum of 8 units. A maximum of 4 units will be accepted toward the Political Science major; a maximum of 4 units will be accepted toward the Political Science minor.

POSC 3999 - Issues in Political Science

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in political science. May be repeated once for credit when content varies, for a maximum of 8 units.

POSC 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

POSC 4910 - Political Science Seminar

Units: 4

Contributions of natural and social science theories, methods, results for political science; scope and method of political science; individual research on selected topics. Registration priority given to political science majors and minors. *Prerequisites: POSC 3030. Open to seniors only.*

Political Science: American Government and Politics

POSC 3111 - The American Presidency

Units: 4

Study of the American Presidency both historically and analytically with an emphasis on roles and powers; the struggle between the President and Congress; the leadership role of the President in government, political parties, and public opinion.

POSC 3113 - Political Internship

Units: 2-4

Practical experience on a legislative or executive staff or in a campaign organization. May be repeated once for credit with consent of instructor, for a maximum of 8 units.

POSC 3115 - United States Congress

Units: 4

Development of the modern Congress, including 20th century reforms; Congressional power; leadership and partisanship; inter-branch relations; Congressional elections and campaign finance reform, incumbency and redistricting; the committee system.

POSC 3120 - State and Local Politics and Government

Units: 4

The structures, processes, policies, political culture and power distributions of governments of states, cities, suburbs, small towns, metropolitan areas and neighborhoods. Special reference to California and San Francisco Bay Area institutions and problems. Satisfies the California state and local government code requirement.

POSC 3130 - Urban Politics

Units: 4

Styles and structures of city government; community power studies; community control and metropolitan government; problems of crime, welfare, finance, education, pollution, planning; emphasis on the Bay Area.

POSC 3150 - Politics of California

Units: 4

Political culture, electoral systems, and public policy in California. Field trip to the California Legislature. Satisfies code requirement in California state and local government.

POSC 3300 - Voting and Public Opinion

Units: 4

Nature and causes of voter turnout and vote choice. Determinants and effects of public opinion. Methodology used for measurement and analysis of these subjects. *Prerequisites: STAT 1000 or 1100.*

POSC 3310 - Political Parties and Campaigning

Units: 4

Party organizations in U.S. and California, historical changes in party operations, political machines and patronage, money in politics, party labels, the differences and similarities between the major parties, minor parties, the new style of campaigns, professional campaign management firms, the prospects for reform.

POSC 3330 - Interest Groups, Lobbying, and Political Reform

Units: 4

Private power and American public policy; the nature and sources, strategy and tactics of pressure group power in the American political process. Business, labor, agriculture, the professions, minority groups, and religion as organized groups influencing political decision making.

POSC 3333 - Ethnic and Minority Politics

Units: 4

Contemporary and historic analysis of ethnic and minority participation in the political process. Voting, elections, interest groups, political machines, office holders, activists, strategies, and common participatory patterns. Cross-listed ES 3333.

POSC 3335 - African American Politics

Units: 4

The role of African Americans in state and national politics; political history of African Americans in American politics, public policy issues concerning African Americans, successes and failures of African American empowerment strategies, and electoral impact of African American votes. *A-F grading only.*

POSC 3336 - Asian American Politics

Units: 4

The role of Asian Americans in state and national politics; political history of Asian Americans in American politics, public policy issues concerning Asian Americans, successes and failures of Asian American empowerment strategies, and electoral impact of Asian American votes. *A-F grading only.*

POSC 3340 - Women and Politics

Units: 4

Public policy relating to American women; impact of the women's movement on public policy and political behavior; women as voters, political activists, political office-holders; the function of sex roles in the political system.

POSC 3360 - Culture and Politics in the United States

Units: 4

How political personality is formed by cultural experience in the U.S. Influences such as generational effects, gender, region, ethnicity and sexual identity. News reporting, literature, movies and television as sources of the development of political personality.

POSC 3375 - Practical Politics

Units: 4

Professional skills in winning elections and influencing policy. Reading and practice in framing issues, political strategy, campaign management, advertising, polling, speech writing, media relations, Internet use, fund-raising, litigation, lobbying, building and sustaining support.

Political Science: Comparative Government and Politics

POSC 3201 - Political Systems of Western Europe

Units: 4

The governments and politics of Great Britain, France, Germany, and other Western European nations. Development and expansion of the European Union.

POSC 3204 - Political Systems of Asia

Units: 4

An analysis of politics in selected Asian countries. The degree of emphasis on particular countries and areas such as China, India, Japan, and Southeast Asia varies.

POSC 3230 - Government and Politics in the Middle East

Units: 4

Introduction to the study of contemporary politics in the Middle East. Comparative approach, analyzing the political, social, religious and economic aspects of the area.

POSC 3260 - Government and Politics of Africa South of the Sahara

Units: 4

The governments of the nations of Africa south of the Sahara, with special reference to comparative colonial policies, nationalist movements, political parties, and the problems of nation building; comparative economic systems and the role of the military.

POSC 3280 - Political Systems of Latin America

Units: 4

Political development, instability, and revolution in a comparative framework. Case studies of political development in major countries; group conflicts, ideology, administrative problems, and the role of violence.

POSC 3290 - Comparative Law

Units: 4

Examination of essential features of law and their impact upon society using a comparative method. Incorporation of comparative legal theory of various legal systems, and how legal institutions express diverse civilizations.

Political Science: International Relations

POSC 3500 - World Problems and Global Response

Units: 4

Arms control, human rights, development, debt, women's rights, world population, environmental protection, and technology transfers. Analysis of key actors (United Nations, specialized agencies, national governments, non-governmental organizations) and policy alternatives. Student opportunity to work with local organizations.

POSC 3505 - American Foreign Policy

Units: 4

National security, economic and development assistance policies since World War II. Current policy choices and the constitutional conflict between Congress and the President. Role of the State Department, the military, the CIA, and non-governmental organizations (labor, business, and veterans).

POSC 3508 - Politics of Filipino-American Relations

Units: 4

Filipino-American relations within the context of Filipino nationalism and America's rise as a superpower.

POSC 3510 - International Security in the 21st Century

Units: 4

Comprehensive approach to studying traditional and non-traditional security concerns in the world. Issues include great power politics, nuclear proliferation, terrorism, failed states, environmental security, and transnational crime. Simulation of crisis situation.

POSC 3520 - International Relations

Units: 4

The conduct of relations among states. The international system, national power, sovereignty, nationalism, ideology; use of diplomacy, propaganda, economic influence, military force; problems of neocolonialism, multinational corporations, racial tensions, nuclear deterrence, war, the role of the United Nations.

POSC 3521 - Politics of the Global Economy

Units: 4

International trade and development assistance. Focus on GATT, the World Trade Organization, the G7 nations, and the International Monetary Fund. Problems of transnational corporations, labor standards, and migration. Global liberalism compared with collectivist economies. Ecological, participatory, regional and nationalist challenges.

POSC 3550 - The United Nations and World Community

Units: 4

Historical, institutional and theoretical background of the contemporary United Nations and related agencies; focus on participation of selected countries in the UN structure and operations with regard to current international problems and issues. May be repeated once for credit by students participating in Model UN, for a maximum of 8 units.

Political Science: Political Theory

POSC 3703 - American Political Thought

Units: 4

Significant American political ideas and thinkers from the Pilgrims to the present. Includes, among others, Jefferson, Madison, Calhoun, King, and Gingrich.

POSC 3704 - Marxism in Theory and Practice

Units: 4

The writings of Marx and the characteristics of Marxism in the 20th century.

POSC 3711 - Greek, Roman and Medieval Political Thought

Units: 4

Major Western political ideas from the Greeks through the 15th century. Emphasis upon major political theorists in the development of classical Greek and Roman, Medieval Christian, and Renaissance political theory.

POSC 3713 - Contemporary Political Thought

Units: 4

Major Western political ideas in the 19th and 20th centuries. Emphasis upon central figures in the development of Democratic, Marxist, Socialist, and various other contemporary bodies of political theory.

POSC 3717 - Theories of Empire

Units: 4

Major theories and debates about imperialism, its history, its modern manifestations, and its status and future in the post-Cold War era.

Political Science: Public Law

POSC 3410 - Law and Society

Units: 4

Rise of the American legal system and evolution of values in the law. Courts in the political system and the policy impact of modern legal initiatives.

POSC 3417 - Survey of American Law

Units: 4

The basic elements of the American legal system, its essential values, and its impact on society. Personal injury, contracts, criminal law, regulation, and international law. Emphasis on case law as the basis for exploring the legal system.

POSC 3441 - American Constitutional Law: Government

Units: 4

The American Constitution as a model of government. The role of democracy, federalism, assumptions regarding human nature, citizenship, separation of powers, capitalism, and issues of empire building.

POSC 3442 - American Constitutional Law: Rights

Units: 4

The Bill of Rights as interpreted by Court decisions since its adoption. Topics include freedom of speech, religion, equal protection, and personal privacy. Emphasis on the relationship among rights, politics, judicial behavior and public policy.

POSC 3460 - Environmental Law

Units: 4

Legislative, judicial, and administrative controls over public and private actions impacting on the environment. Examination of statutory, administrative, and judicial decisions relating to the environment and of government actors and agencies making these decisions.

POSC 3470 - International Law

Units: 4

The rules that govern governments and world bodies. Includes treaties, law of the sea, environmental protection, use of force, terrorism, and markets. Focus on the movement toward global community. Not open to students with credit for POSC 3951.

POSC 3503 - Philosophy of Law

Units: 4

(See PHIL 3503 for course description.)

POSC 4445 - Bureaucratic Politics and Administrative Law

Units: 4

(See the "Public Policy and Administration" section for course description.)

Political Science: Public Policy and Administration

POSC 3419 - Labor Policy and Law

Units: 4

Historical development and changing fortunes of working class, trade unions, immigrant, and women workers. Growth among government workers and declining numbers in private industry. U.S. Government's labor laws and judicial interpretation for private and public sectors.

POSC 3522 - The Politics and Law of New Genetic Technologies

Units: 4

The politics and law of new genetic technologies (cloning, stem cell research, genetic engineering, etc.) in global perspective. National and international models for oversight. Comparison of approaches by types of political regime and economic system.

POSC 3800 - Public Policy Analysis

Units: 4

Surveys the formulation, implementation, and impact of public policy dealing with social and economic problems. Examines and evaluates the causes and content of government policy in various areas such as civil rights, social welfare, urban affairs, crime, education, health, environment, energy, taxation.

POSC 4171 - Public Policy and the Environment

Units: 4

Politics of human-environment relationships. Sustainability, biodiversity, population, consumption, technology, energy, water, resources, recycling, pollution, and urban systems. Cultural values, paradigm change, science, risk analysis, market pricing, competition of networks, and citizen action. Significant written assignment integrates theory and practice.

POSC 4445 - Bureaucratic Politics and Administrative Law

Units: 4

Politics of bureaucracy, government regulations, administrative law, exploration of the content, and structure of public administration. Public finances, human resource management, workplace discrimination, ethics, regulation within institutions. Cross-listed PUAD 4445.

Psychology

PSYC 1000 - General Psychology

Units: 5

An introduction to the scientific study of basic processes underlying human and animal behavior; sensation and perception, learning and thinking, motivation, and emotion. Not open to students with credit for PSYC 1001, PSYC 1005, PSYC 2004, or PSYC 2009. Four hrs. lect., 2 hrs. act. or 5 hrs lect.

PSYC 1001 - General Psychology and Society

Units: 5

An introduction to the scientific study of basic processes underlying human and animal behavior, sensation and perception, learning and thinking, motivation and emotion, as it relates to the individual and society. Not open to students with credit for PSYC 1001, PSYC 1005, PSYC 2004, or PSYC 2009.

PSYC 1002 - General Psychology of Music and Mind

Units: 5

Introduction to the scientific study of basic processes underlying human and animal behavior: sensation and perception, learning and thinking, motivation, and emotion, with an emphasis on those processes relevant to music. Not open to students with credit for PSYC 1000, PSYC 1001, PSYC 1005, PSYC 2004, or PSYC 2009. *A-F grading only*. Satisfies GE Area: B2, B5, and Area D.

PSYC 1005 - General Psychology for Healthier Living

Units: 5

An introduction to the scientific study of basic processes underlying human and animal behavior; sensation and perception,

learning and thinking, motivation, and emotion. Emphasis on psychological aspects of health. Not open to students with credit for PSYC 1001, PSYC 1005, PSYC 2004, or PSYC 2009.

PSYC 1100 - Critical Thinking in Psychology

Units: 4

The role of critical thinking in the scientific study of behavior. Inductive and deductive use of experiments by which selected problems are investigated with emphasis on experimental design and common logical fallacies in interpreting empirical data. Not for credit in the Psychology major.

PSYC 2020 - Methods of Investigation in Psychology

Units: 4

Experimental, correlational, and observational methods in the study of psychology with selected examples. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005).* Not open to students with credit for PSYC 3090.

PSYC 3100 - Experimental Psychology

Units: 5

A laboratory course in the development, design, and execution of psychological experiments, the analysis of data, and the writing of formal research reports. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005) and PSYC 2020; and STAT 1000 and STAT 3010.* Three hrs. lect., 6 hrs. lab.

PSYC 3190 - Human Factors Engineering

Units: 4

(See INDE 3190 for course description.)

PSYC 3200 - Psychological Tests

Units: 4

Introduction to selecting and evaluating standardized tests of aptitude, achievement, personality, and other human traits. Validity, reliability, generalizability, and ethics. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005) and STAT 1000 and STAT 3010.*

PSYC 3210 - Principles of Survey and Test Construction

Units: 4

Construction of survey or test instruments using Classical Test theory and Item Response theory; item development; sampling; data analysis; test bias and test fairness; interpretation and presentation of results. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005) and STAT 1000 and STAT 3010.*

PSYC 3220 - Psychology of Individual Differences

Units: 4

Survey of human traits (including intelligence), and examination of evidence for differences among individuals differing in sex, age, personality, race, etc. Consideration of social implications. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005) and STAT 1000 and STAT 3010.*

PSYC 3230 - Applied Measurement

Units: 4

An introduction to applied measurement. Signal detection theory, unidimensional scaling, multidimensional scaling, and policy modeling techniques. Relevance to cognitive processes, industrial psychology, and perceptual processes. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005) and STAT 1000 and STAT 3010.*

PSYC 3240 - Decision Theory

Units: 4

An introduction to the literature and methods of decision science. The theory and decision strategies, with examples across many applications. Focus on descriptive as opposed to normative models. Students will study decision strategies and methods of modeling preference structures. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005) and STAT 1000 and STAT 3010.*

PSYC 3250 - Behavior Modification

Units: 4

The extension of principles and concepts emerging from the experimental analysis of behavior to problems of behavior modification outside the laboratory. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005).*

PSYC 3400 - Ergonomics and Human Factors

Units: 4

Human factors in tasks involving attention, decision making, and other complex responses. Current findings, methods of research, and applications in industry and other man-machine situations. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005).*

PSYC 3410 - Psychology of Women

Units: 4

Critical examination of data affecting views of and by women, including: socialization of sex-roles, rape, marriage, the family, career barriers, development of stereotypes. Psychology majors may take for university credit. *Prerequisites: WOST 1000 or upper division standing. Not for credit in Psychology major.*

PSYC 3420 - Stress and Coping

Units: 4

A systematic look at the major theories and research about stress and coping, with discussion of applications. Stress and coping will be examined in the context of everyday situations, e.g., illness, death and dying, and the workplace. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005).* Not open to students with credit for PSYC 2420.

PSYC 3500 - Social Psychology

Units: 4

Current theory and research on behavioral and cognitive processes arising in human social interaction. Emphasis on experimental investigations of self appraisal and attribution, collective and group dynamics, social conformity and conflict. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005).*

PSYC 3520 - Interpersonal Processes

Units: 4

Selected topics on the development and maintenance of social relationships, interpersonal attraction, self disclosure,

communication dynamics of power and intimacy, and the resolution of conflict. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005).*

PSYC 3540 - Groups and Organizations

Units: 4

The behavior of individuals in modern groups and organizations: work groups, universities, and other bureaucracies. Emphasis on theories of problem solving to create satisfying, effective, productive environments within organizations. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005).*

PSYC 3550 - Social Influence and Change

Units: 4

Selected topics in the use of persuasion and social power to effect both behavioral compliance and attitude change: Includes problems of effective leadership and intervention as well as resistance to change in applied settings. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005).*

PSYC 3560 - Psychology of Negotiation and Conflict Resolution

Units: 4

Survey of psychological research on negotiation and conflict resolution processes. Specific topics include: cognitive, motivational, and emotional processes involved in misunderstanding, conflict, negotiation and conflict resolution. *Prerequisites: PSYC 1000, or PSYC 1001, or PSYC 1005.* A-F grading only.

PSYC 3600 - The Impact of Culture on Social Psychology

Units: 4

A survey of cultural variations in motivational, cognitive, and emotional processes (such as attitude and social judgment), and how such variations manifest themselves in interpersonal and group contexts (such as conflict resolution). *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005) and PSYC 2020.*

PSYC 4200 - Conditioning and Learning

Units: 4

Basic principles and results of conditioning and learning experimentation. *Prerequisites: PSYC 2020 or PSYC 1100.*

PSYC 4210 - Theories of Learning

Units: 4

Survey of theories of learning with emphasis on experimental work arising from them; their underlying assumptions, strengths and weaknesses, practical implications, and methodological approaches to research problems. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005) and PSYC 2020 and PSYC 4200.*

PSYC 4220 - Cognitive Processes

Units: 4

Selected topics in thinking and information processing in humans, e.g., problem solving, language, memory and forgetting, concept formation, attention, creativity, imagery, etc. Various theories and selected experiments are described, analyzed and interpreted. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005).*

PSYC 4300 - Motivation

Units: 4

Nature of primary and secondary drives. Critical analysis of the concept of motivation in relation to behavior, learning, and performance. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005) and PSYC 4200.*

PSYC 4310 - Comparative Psychology

Units: 4

Survey of the similarities and differences in sensory systems, learning, motivation, social organization, and development of closely related and relatively unrelated animals, including the human species. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005).*

PSYC 4320 - Physiological Psychology

Units: 4

The biological foundations of human and animal behavior, including physiological processes related to sensory and motor activity, perception, learning, thinking, motivation, and emotion. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005).*

PSYC 4345 - Sensation and Perception

Units: 4

The function of the eyes, ears, and other sense organs in bringing information about the world to the brain. The use of this information in perceiving objects and events. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005).*

PSYC 4350 - Heredity and Behavior

Units: 4

A consideration of genetic and environmental determinants of behavior and psychological characteristics of animals and humans. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005).*

PSYC 4360 - Psychopharmacology

Units: 4

Classification of psychoactive drugs, principles of action, reading the drug literature critically, beneficial and harmful effects of prescription and illegal drugs, prevention and treatment of abuse, pharmacotherapy, including alternatives to psychiatric drugs. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005).*

PSYC 4370 - Cognitive Neuroscience

Units: 5

Overview of research examining the neural mechanisms underlying cognitive processes such as perception, attention, memory, and language. *Prerequisites: PSYC 1000 or PSYC 1001 or PSYC 1005, and PSYC 4320. A-F grading only.*

PSYC 4390 - History and Systems of Psychology

Units: 4

Survey of historical developments in the emergence of modern scientific psychology. Contemporary theoretical systems discussed with emphasis on how they approach the recurring problems of psychology. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005) and 16 units of upper division psychology and senior standing.*

PSYC 4410 - Abnormal Psychology

Units: 4

Overview of the major psychiatric disorders such as mood and anxiety disorders, posttraumatic stress disorder, personality disorders, substance abuse and dependence, and schizophrenia. Emphasis is on diagnostic criteria; biological, psychological, and sociocultural causes; and treatment implications. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005).*

PSYC 4420 - Developmental Psychology

Units: 4

Psychological development across the life span. Affords a developmental perspective of perception, cognition, language, and of emotional, social, and personal behavior. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005).*

PSYC 4440 - Child Psychopathology

Units: 4

Survey of psychiatric disorders affecting children and adolescents. Emphasis is on diagnostic criteria; biological, psychological, and sociocultural causes; and treatment implications. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005).*

PSYC 4500 - Industrial Psychology

Units: 4

Applications of industrial psychology concepts and methods to actual cases (e.g., hiring, evaluation, motivation, training, compensation, safety, marketing, total quality management, stress management, morale, ethics/dishonesty, reorganization, human factors). Lecture, case study, individual and group projects. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005) and STAT 1000 and STAT 3010, and Senior standing.*

PSYC 4610 - Psychology of Personality

Units: 4

Critical review of method and content in the study of personality. Historical development of the field, with attention to recent applications of scientific method to problems of personality. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005).*

PSYC 4620 - Theories of Personality

Units: 4

Undergraduate seminar: survey and analysis of some major theories of personality, including systematic analysis of theory construction. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005) and PSYC 4410 or PSYC 4440 or PSYC 4610.*

PSYC 4630 - Introduction to Psychotherapy and Clinical Methods

Units: 4

Overview of professional issues in clinical psychology and the theoretically based approaches to psychotherapy (i.e., psychoanalytic, cognitive, behavioral, existential, humanistic, and systems). *Prerequisites: PSYC 4410 or PSYC 4610.*

PSYC 4660 - The Psychology of the Healthy Personality

Units: 4

Topics include models of psychological health, maintenance of health across the life span, and the dilemmas women and minorities face in maintaining health in the face of discrimination. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005).*

PSYC 4740 - Psycholinguistics

Units: 4

Basic psychological aspects of human verbal behavior and related phenomena. The acquisition and development of language, perception of language, and effect of language on thought. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005).*

PSYC 4800 - Human Learning and Cognition Laboratory

Units: 2

Selected experiments in human learning, verbal learning, abilities, and problem solving. Experiments will be designed, executed, analyzed, and reported. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005) and PSYC 2020 and PSYC 3100 and STAT 1000 and STAT 3010 and PSYC 4200 or PSYC 4220 or PSYC 4740.* May be repeated three times for credit, for a maximum of 8 units. Six (6) hrs. lab.

PSYC 4801 - Learning and Motivation Laboratory

Units: 2

Selected experiments in conditioning, learning and motivation, with an emphasis on subhuman species. Experiments will be designed, executed, analyzed and reported. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005) and PSYC 2020 and PSYC 3100 and STAT 1000 and STAT 3010 and PSYC 4200.* May be repeated three times for credit, for a maximum of 8 units. Six (6) hrs. lab.

PSYC 4802 - Sensation and Perception Laboratory

Units: 2

Selected experiments from psychophysics, perception, vision, audition, and olfaction. Experiments will be designed, executed, analyzed, and reported. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005) and PSYC 2020 and PSYC 3100 and STAT 1000 and STAT 3010 and PSYC 4200 or PSYC 4220 or PSYC 4740.* May be repeated three times for credit, for a maximum of 8 units. Six (6) hrs. lab.

PSYC 4804 - Social and Personality Laboratory

Units: 2

Selected experiments in social psychology and personality problem areas. Experiments will be designed, executed, analyzed, and reported. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005) and PSYC 2020 and PSYC 3100 and STAT 1000 and STAT 3010 and PSYC 3500 or PSYC 4610.* May be repeated three times for credit, for a maximum of 8 units. Six (6) hrs. lab.

PSYC 4806 - Developmental Psychology Laboratory

Units: 2

Selected experiments from a human developmental perspective. Experiments will be designed, executed, analyzed, and reported. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005) and PSYC 2020 and PSYC 3100 and STAT 1000 and STAT 3010 and PSYC 4420.* May be repeated three times for credit, for a maximum of 8 units. Six (6) hrs. lab.

PSYC 4807 - Clinical Psychology Laboratory

Units: 2

Selected research in clinical psychology. Studies will be designed, executed, analyzed, and reported. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005) and PSYC 2020 and PSYC 3100 and STAT 1000 and STAT 3010 and PSYC 4410 or PSYC 4440.* May be repeated three times for credit, for a maximum of 8 units. Six (6) hrs. lab.

PSYC 4808 - Industrial Psychology Laboratory

Units: 2

Selected experiments in industrial psychology, tests and surveys, and decision-making. Experiments will be designed, executed, analyzed, and reported in APA format. *Prerequisites: PSYC 1000 (or PSYC 1001 or PSYC 1005) and PSYC 2020 and PSYC 3100 and STAT 1000 and STAT 3010 and PSYC 3210 or PSYC 3240 or PSYC 4500*. May be repeated three times for credit, for a maximum of 8 units. Six (6) hrs. lab.

PSYC 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

Public Administration

PUAD 3999 - Issues in Public Administration

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in public administration. May be repeated for credit when content varies, for a maximum of 8 units.

PUAD 4445 - Bureaucratic Politics and Administrative Law

Units: 4

(See POSC 4445 for course description.)

PUAD 4800 - Public Administration and Society

Units: 4

The historical and political context of public administration; politics and economics of public bureaucracy; managing governmental organizations; public finance and national economy; values, ethics, and public interest; interface between professional administrators and citizens. *Prerequisites: "Classified Graduate" standing in the M.P.A. program.*

PUAD 4830 - Organization Theory and Human Behavior

Units: 4

Classical and emerging theoretical perspectives on human organizations; organizational design and tomorrow's organizations; self and organization; environment and planned change; participative goalsetting and organizational effectiveness. *Prerequisites: "Classified Graduate" standing in the MPA program.*

PUAD 4840 - Fundamentals of Information Management in the Public Sector

Units: 4

Fundamentals of information technology, information policy, and management in the public and nonprofit sectors; computerized applications for the collection, analysis, and presentation of information; research using online databases. Ten hrs/week in computer lab.

PUAD 4900 - Independent Study

Units: 1-2

May be repeated for credit with consent of instructor, for a maximum of 12 units.

Public Administration: Graduate

PUAD 5000 - Philosophy of Public Administration

Units: 4

Critical analysis of emerging domestic and global ideas and issues shaping and being shaped by the public sector. Theoretical perspectives on understanding values, ethics, citizenship, public good, and search for democratic administration. *Prerequisites: PUAD 4800, PUAD 4830.*

PUAD 5900 - Independent Study

Units: 1-4

PUAD 6762 - Group Procedures and Facilitation

Units: 4

Focus on becoming a lifelong learner and change manager by developing self-awareness and critical reflection skills. Explore learning styles, managing oneself, interpersonal skills, systems and integrative thinking, group processes and managing change. Includes discussion, group activities, and case problems. *Prerequisites: PUAD 6812 or HCA 4200.*

PUAD 6765 - Organizational Diagnosis and Assessment

Units: 4

Intervention strategies (e.g., systems-based, appreciative inquiry, dialogue conferences, action learning), O. D. methods, interview techniques, observation, surveys, and discussion. Course participants carry out an organizational diagnosis and assessment.

PUAD 6766 - Organizational Intervention and Engagement

Units: 4

Models and methods of managing organizational change, data collection and interpretation, and stakeholder engagement; ethical practices. Course participants carry out an organizational diagnosis and intervention. May be repeated once for credit for a maximum of 8 units.

PUAD 6801 - Public Policy Formulation

Units: 4

Critical analysis of public policy-making processes; interrelationships among policy formulation, implementation, evaluation, and revision; alternative models of the policy process. *Prerequisites: PUAD 4800.*

PUAD 6802 - Seminar in Public Policy Implementation

Units: 4

Developing strategies and tactics for identifying and solving implementation problems. Implementation as a design, evaluative, and learning process. Analysis of implementation case studies. *Prerequisites: PUAD 6801.*

PUAD 6809 - Seminar in Public Program Evaluation

Units: 4

Assessment of policy impact and effectiveness; analysis of program objectives; methods of evaluation; developing action-oriented evaluation processes; administration of evaluation systems. *Prerequisites: PUAD 6801.*

PUAD 6811 - Human Organizations and Social Realities

Units: 4

Post-modernist approaches to the understanding of organizational realities, including phenomenological, critical, feminist, and other interpretive approaches; subjective, intersubjective, contextual, historical influences; organizational socialization and personality growth, personal and organizational value development and human effectiveness. *Prerequisites: PUAD 4800 and PUAD 4830.*

PUAD 6812 - Changing Human Organizations

Units: 4

Application of interpretive, critical, and postmodern theories to changing organizations; use of meaning-centered, experientially grounded theories for understanding organizational cultures; personal praxis in changing organizations. *Prerequisites: PUAD 6811.*

PUAD 6815 - Ethics and Administrative Responsibility

Units: 4

Ethical dimensions of the public service; value dilemmas, administrative ethics and accountability, responsibility in making public choices, whistle-blowing, the public interest; equality and equity in democracy. *Prerequisites: PUAD 6801 and PUAD 6811.*

PUAD 6830 - Advanced Information Management in Public Organizations

Units: 4

Critical examination of the use of information management; e-government; implications of using analytical techniques for public policy analysis, budgeting, decision making, knowledge management, and improvement of client services. *Prerequisites: PUAD 4800 and PUAD 4830.*

PUAD 6831 - Research Methods in Public Administration I

Units: 4

Theory and methods of interpretive research in the public sector. Emphasis on meaning-centered and inductive modes of data-gathering and analysis, including interviews, participant observation, ethnographic methods and the development of grounded theory. Issues in case study presentation and field research narratives. *Prerequisites: PUAD 4800, PUAD 4830, and PUAD 5000.*

PUAD 6832 - Research Methods in Public Administration II

Units: 4

Positivistic research methods; uses of quantitative and computer analysis; application of quantitative approaches to organizational improvement, policy research, and decision making; implementation of research design; examination of the logic underlying application of quantitative methods and statistical techniques. *Prerequisites: PUAD 4800, PUAD 4830, and PUAD 5000.*

PUAD 6840 - Seminar in Public Finance Administration

Units: 4

Budgetary processes in public policy formation and administrative control; strategic principles of fiscal policy in attaining public goals; public revenues, sources, incident, and effect of principal taxes; intergovernmental aspects of revenue problems; grants in aid. *Prerequisites: PUAD 6801.*

PUAD 6842 - Governmental Budgeting

Units: 4

Governmental budgeting as political and social process; administrative control at federal, state, local levels; central budget agencies and budget offices in operating agencies, budgets as planning, policymaking and management instruments; executive-legislative relationships. *Prerequisites: PUAD 6801.*

PUAD 6850 - Human Resource Management in the Public Sector

Units: 4

Development of public service concepts and institutions; assessment of public personnel methods and organizations; interaction with other management functions, and with the executive and legislative processes; influence of social and political values upon public service concepts. *Prerequisites: PUAD 6811.*

PUAD 6851 - Work and Organizations of the Future

Units: 4

Critical assessment of the nature of work and traditional human resource practices in public organizations. Empowering and involving employees. Diversity, trust, and mutualism. Relationships among information technologies, the organization, employees, and citizens. Creating the organization of the future. *Prerequisites: PUAD 6811.*

PUAD 6854 - Seminar in Public Labor Relations

Units: 4

History and present legal status of public labor relations; changing concepts and their implications for existing institutions; processes and values in public personnel systems; dispute resolution; cooperative labor/management committees and other current issues. *Prerequisites: PUAD 6801.*

PUAD 6864 - Managing Public Organizations

Units: 4

The responsibilities of the public sector manager; differences between private and public sector management; short versus long-term management in the public sector. Critical examination of public managers as strategic leaders. *Prerequisites: PUAD 6801.*

PUAD 6869 - Topics in Public Management

Units: 4

Specialized investigations of public management issues and problems selected by instructor. *Prerequisites: PUAD 6801.* May be repeated once for credit when content varies, for a maximum of 8 units.

PUAD 6878 - Transforming Health Care

Units: 4

Emerging career plans in health care administration. The implications of decentralized health care and integrated health systems

for health care workers. The future of health care delivery systems and the wider impact of these changes on the social order.
Prerequisites: PUAD 6801 and PUAD 6811.

PUAD 6893 - Internship in Public Administration

Units: 1-4

Academically challenging field placements in half-time or full-time positions with governmental agencies under the supervision of university faculty member. Examination of the relationship of theory to practice in the provisions of public service.
Prerequisites: "Classified Graduate" status and the consent of the Internship Coordinator. CR/NC grading only.

PUAD 6897 - Community Health Administration Practicum

Units: 4

Practical experiences through field work with community agencies, emphasis on improving a student's ability to activate community resources and support sustainable wellness communities. *Prerequisites: HCA 4200, and either PUAD 4830 or MGMT 3614.*

PUAD 6898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least a 3.0 GPA; the approval of the Internship Coordinator.* May be repeated for credit, for a maximum of 8 units. A maximum of 4 units will be accepted toward the Master of Public Administration degree. *CR/NC grading only.*

PUAD 6900 - Independent Study

Units: 1-4

PUAD 6901 - Graduate Synthesis

Units: 4

A synthesis of public administration theories and concepts through a critique of major readings in the field. *Prerequisites: For Comprehensive Examination. Advancement to Candidacy (completion of all core courses, option area requirements, and electives) and consent of instructor.*

PUAD 6909 - Departmental Thesis

Units: 1-4

Development and writing of a research paper for submission to the department, which specifies its format. Supervision by a departmental faculty member. Oral defense normally required. (See also "Departmental Thesis Guidelines," available in department office.) *Prerequisites: Advancement to Candidacy and consent of thesis advisor. Maximum of 4 units per student.*

PUAD 6910 - University Thesis

Units: 1-4

Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See also "University Thesis Writing Guide," www.csueastbay.edu/thesiswritingguide.) *Prerequisites: Advancement to Candidacy and consent of Thesis Committee. Maximum of 4 units per student.*

PUAD 6999 - Issues in Public Administration

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in public administration. May be repeated for credit when content varies, for a maximum of 8 units.

Recreation

REC 1000 - Introduction to Recreation

Units: 4

An introductory multi-disciplinary and multi-cultural investigation of the implications of how leisure contributes to the quality of life of individuals and communities. Survey of institutions and organizations providing recreational services, examining the effects of ethnicity, dominant culture, age and ability on service delivery. This is a prerequisite for all core courses.

REC 2050 - Computers in Hospitality, Recreation and Tourism

Units: 2

Competency based introduction to computers as a tool in leisure and hospitality. Must earn a grade of B- or better to earn credit for this course.

REC 2100 - Leadership Principles in Action

Units: 4

Exploration and development of decision making skills, program design, and character education for youth and young adults. Effects of urban and suburban environments on discipline, cultural tolerance, and youth development will be explored. Class will require active learning while producing leisure experiences for student life on campus.

REC 2200 - Programming in Leisure Services

Units: 4

Examination of factors influencing the planning processes of designing small and large activities or events. Planning and conducting activities for groups with attention to assuring social justice for ability, ethnic and cultural diversity. Active learning required.

REC 2400 - Leisure, Self, and Society

Units: 4

Multi-disciplinary, multi-cultural investigation of the impact of recreation, leisure, and learning on individual, community, and human behavior and development, including ethnicity, dominant culture, age, and leisure behavior. Leisure's impact on society and the quality of life.

REC 2500 - Service Learning in Leadership, Hospitality and Leisure 1

Units: 1-4

Field experiences in leisure, hospitality and community services agencies. Supervision of students by agency and reporting to University supervisor via online. One hundred hours of field experience for 4 units. 25 hours of service per unit. May be repeated for credit with consent of department, for a maximum of 8 units. *CR/NC grading only.*

REC 3000 - Philosophy of Leisure

Units: 4

Analysis of the roots of current practices, theories and philosophies in the fields of leisure, and hospitality. Introduction to leisure and its impact in the world's environment, the need to promote sustainable tourism and understanding cultural differences in leisure. Development of one's own philosophy, both personal and professional.

REC 3010 - Service Learning in Hospitality, Recreation and Tourism 2

Units: 4

Service learning in leisure, hospitality, clinical, school, college, and community settings. One hundred (100) hours of service with online reflection assignments connecting professional theories with professional service. May be repeated once for credit with consent of instructor, for a maximum of 8 units. *CR/NC grading only.*

REC 3200 - Wellness Through Leisure

Units: 4

Theories and concepts of wellness, health and self-efficacy. The importance of leisure, recreation, the environment, education and culture in the development of wellness. Self-responsibility in the pursuit of holistic wellness through leisure.

REC 3202 - Women and Leisure

Units: 4

Exploration of women and their leisure and recreation pursuits from a creative, historical and cultural perspective. Leisure's role in contributing to the quality of life of women. Women's leisure expression as a reflection of societal change.

REC 3300 - Leadership in Hospitality, Recreation and Tourism

Units: 4

Examination of leadership theories, successful leadership techniques, and analysis of self in leadership roles. Emphasis is placed on group work and dynamics, communication, and cultural and ethnic diversity. Leadership supervision of employees, volunteers, and clients using cooperative team building techniques will be taught through active learning. *Prerequisites: HOS 1100, REC 1000, REC 2050, REC 2400 or REC 3000 or permission of instructor.*

REC 3305 - Outdoor Living Skills

Units: 4

Introduction to backpacking equipment and clothing, map orientation, wilderness survival and first aid, trip planning and logistics. Practical outdoor experience in developing leadership, group dynamics, problem-solving, and team building skills. Requires one weekend backpacking trip.

REC 3401 - Leadership of Small Groups

Units: 4

Direct leadership techniques, incorporating programming principles to design and implement programs and activities for small groups. Students will be providing services to the University community.

REC 3510 - Management and Supervision in Hospitality, Recreation and Tourism

Units: 4

The art and science of managing and supervising employees, including seasonal, contract and full time professionals with different bureaucratic constrictions on job duties and responsibilities. Exploration of hiring, training, motivation, discipline, legal, ADA and ethical concerns in public leisure settings.

REC 3701 - Evaluation and Research in Hospitality, Recreation and Tourism

Units: 4

Explore the use of data to make informed decisions as a manager in Leisure and Hospitality settings. Students will learn how to conduct a literature review, design surveys, collect and analyze data, and create reports using both quantitative and qualitative data. Community survey methods and techniques will be taught through active learning. *Prerequisites: HOS 1100, REC 1000, REC 2050, REC 2400 or REC 3000 or permission of instructor.*

REC 3800 - Introduction to Recreation Therapy

Units: 4

Introduction to theory and techniques used in the practice of therapeutic recreation. Activity analysis, disability awareness, mainstreaming and integration, empowerment, learned helplessness, risk management, and quality assurance.

REC 3999 - Issues in Hospitality and Leisure Services

Units: 1-4

Readings, discussion, and research on contemporary and/or significant issues in leisure and hospitality. May be repeated for credit when content varies, for a maximum of 8 units.

REC 4000 - Administration and Budgeting in Recreation

Units: 4

Study of organizational management including human resources, financial strategies (including introduction to preparing budgets), strategic planning, organizational culture, risk management, ethics, and legal aspects of management. *Prerequisites: HOS 1100, REC 1000, REC 2050, REC 2400 or REC 3000, REC 3000, REC 3300, REC 3510, or permission of instructor.*

REC 4011 - Youth Development through Leisure

Units: 4

Principles of working with elementary age children using sports and recreation to develop character and self-esteem. First part of course will encompass lecture/activities. Second part includes participation in youth programs. Written assignment required. May be repeated once for credit, for a maximum of 8 units.

REC 4050 - Social Justice in Hospitality, Recreation and Tourism

Units: 4

Understanding our diverse society through an in-depth analysis of attitudes and beliefs about people, our differences and similarities (culture, ethnicity, disability) and how to treat everyone with dignity and respect. *Prerequisites: HOS 1100, REC 1000, REC 2050, REC 2400 or REC 3000 or permission of instructor.*

REC 4100 - Professional Issues in Hospitality, Recreation and Tourism

Units: 2

Critical examination of issues including professional certification, accountability, ethics, diversity, environmental health and

safety. Exploration of professional groups supporting the profession and the role of maintaining professional knowledge and personal responsibility. *Prerequisites: HOS 1100, REC 1000, REC 2050, REC 2400 or REC 3000 or permission of instructor.*

REC 4300 - Facilities Management and Administration in Leisure

Units: 4

Management of leisure and hospitality areas and facilities: clientele considerations, facility and outdoor area site planning; day-today operations of common recreation areas and facilities. Agency visitation required. Two lectures, 3 days of field trips to recreation centers, aquatic center, and parks. Spring break class. Must attend ALL class sessions. Contact instructor for Online requirements if necessary. *Prerequisites: HOS 1100, REC 1000, REC 2050, REC 2400 or REC 3000 or permission of instructor.*

REC 4501 - Special Events Management 1

Units: 4

Planning and implementing special events and conferences. Topics include event planning, coordination, research, marketing, logistics, themes, programming, volunteers, risk management, and evaluation. May be repeated once for credit, for a maximum of 8 units.

REC 4600 - Recreation Therapy Documentation and Assessment

Units: 4

Assessment procedures and instruments used to assure competence in assessment of client function in leisure. Documentation, assessment, regulations in different settings (i.e., community, hospital, and clinical settings), protocols and development of individual treatment plans. *Prerequisites: HOS 1100, REC 1000, REC 2050, REC 2400 or REC 3000 or permission of instructor.*

REC 4601 - Recreation Therapy Treatment and Program Planning

Units: 4

Theory, techniques and modalities used in recreation therapy. Foundations of leisure counseling and leisure education. Systems theory of program design including individual and group program plans, risk management and quality assurance. Fifty (50) hours of practicum required.

REC 4602 - Recreation Therapy Processes

Units: 4

Theory and application of leisure modalities including leisure education, activity adaptation, and equipment modification. May be repeated once for credit with consent of instructor, for a maximum of 8 units.

REC 4603 - Recreation Therapy Programming

Units: 4

Non-competitive activities to promote self-esteem and self efficacy. Active student learning and participation to demonstrate effective programming techniques. May be repeated once for credit with consent of instructor, for a maximum of 8 units.

REC 4604 - Recreation Therapy: Advancing the Profession

Units: 4

Professional development of knowledge needed to practice recreation therapy including licensure, certification standards, accreditation standards in clinical settings and the recreation therapist's role. Advocacy and legislation pertaining to RE practice, and links to higher education and internship placements to promote RE. *A-F only.* On-line course only.

REC 4605 - Recreation Therapy: Treatment and Diagnostic Groups

Units: 4

In-depth study of disabling conditions recreation therapists work with including brain injury, spinal cord injury, mental illness, stroke, cognitive difficulties, and challenges of aging. The standard treatment protocols of each disability will also be discussed. The ramifications of the disabilities on a person's mental, physical, emotional, social, and spiritual well-being. *Prerequisites: HOS 1100, REC 1000, REC 2050, REC 2400 or REC 3000 or permission of instructor. A-F grading only.*

REC 4702 - Facilitating Adventure-Based Outdoor Leadership Programs

Units: 4

Current principals, procedures, techniques and foundations in facilitating outdoor adventure-based counseling and leadership programs. Developing curriculum, group preparation, implementing and processing safe adventure experiences using low and high element ropes courses and natural resources. May be repeated once for credit, for a maximum of 8 units.

REC 4705 - Outdoor Adventure Recreation

Units: 4

Lecture, discussion, and participation in outdoor recreation activities. Includes rock-climbing, sailing, sea kayaking, orienteering, hiking, and mountain biking. Classes on five Saturdays, dates and locations to be announced.

REC 4896 - Recreation Management Internship Placement

Units: 2

Internship placement, must meet with advisor two quarters before intended internship, interview with intern sites, get a signed contract. **MUST** successfully complete LiveSCAN, including background check and fingerprinting. Interviewing techniques, networking and professional expectations will be discussed with advisor. *Prerequisites: Completion of all core and elective classes, or permission of instructor.*

REC 4897 - Recreation Therapy Internship Placement

Units: 2

To secure an internship placement in an approved site with a certified therapist, students must meet with advisor a minimum of two quarters before intended internship, interview with intern sites, and get a signed contract. Written assignments are required to successfully complete this process. Students **MUST** successfully complete LiveSCAN, including background check and fingerprinting. Interviewing techniques, networking and professional expectations will be discussed with advisor. Online requirements are similar with interaction with faculty done virtually. *Prerequisites: All major and department core classes complete or permission of the chair and the instructor. CR/NC grading only.*

REC 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

REC 4910 - Recreation Management Internship and Senior Project

Units: 4-12

Field experience in recreation organizations in preparation of a professional role. Supervision by agency and university personnel. Minimum of 400 hours and senior project. Student must complete a minimum of 12 hours of credit and a total of 400

hours. *Prerequisites: Completion of all core and elective classes, or permission of instructor.* May be repeated six times for credit with consent of instructor, for a maximum of 24 units. *CR/NC grading only.*

REC 4911 - Recreation Therapy Internship and Senior Project

Units: 12

Field experience in recreation therapy agency. Supervision by agency and university personnel. Minimum of 600 hours and senior project. Supervisor must be NCTRC certified. *Prerequisites: Completion of all core and elective classes, or permission of instructor.* May be repeated once for credit with consent of instructor, for a maximum of 24 units. *CR/NC grading only.*

REC 4913 - Senior Special Project

Units: 12

Large special project designed with the interests of the students and the needs of the department, this project will make a significant contribution to the life of the department, the campus or a community. This is especially designed for those nontraditional students with full time employment who cannot complete our traditional internship. It is NOT for people wanting to pursue future employment in a traditional Parks and Recreation position. *A-F grading only.*

Recreation and Tourism: Graduate

REC 6000 - Research Methods in Leisure Studies

Units: 4.5

Theory of qualitative and quantitative research and their design methodologies. Essential elements of applied research in the field of leisure, including statistical analyses. *Prerequisites: Graduate standing or consent of instructor.*

REC 6100 - Philosophical Foundations and Theories of Leisure

Units: 4.5

Examination of leisure theories through time, history of the profession. Organizational and community contexts of leisure, roles and socialization, natural and constructed environments. The relationship of leisure to family, work, subcultures, and resources. *Prerequisites: Graduate standing or consent of instructor.*

REC 6200 - Strategies in Staff Supervision

Units: 4.5

Examination of basic motivation, individual differences (including culture, race, ability, sexual orientation), employee growth, and social interaction. Implications for developmental intervention and human services. *Prerequisites: Graduate standing or consent of instructor.*

REC 6300 - Organizational Development in Leisure

Units: 4.5

Exploration of the strategic role of systems theory in organizational development and the wider scope of creating strong communities through systems in recreation and leisure services. *Prerequisites: Graduate standing or consent of instructor.*

REC 6400 - Current Management Topics in Leisure

Units: 4.5

Examination of post-industrial management practices and emerging fields of study that influence the management of recreation and leisure organizations. *Prerequisites: Graduate standing or consent of instructor.*

REC 6500 - Critical Analysis of Leisure Research

Units: 4.5

An analysis of leisure research and its application in the work of leisure professionals. Examination of recent research in leisure and its appropriate application into the best practices in the field. *Prerequisites: REC 6000, Graduate standing, or consent of instructor.*

REC 6601 - Planning, Development, and Management of Sustainable Tourism

Units: 4.5

Course Content: Tourism's positive and negative impacts and the importance of best sustainable practices on the effectiveness of protecting, sustaining, and conserving tourism destinations and businesses. *Prerequisites: Graduate standing or consent of instructor.* Not open to students with credit for REC 6600 . *A-F grading only.* On-line course.

REC 6700 - Advanced Social Justice and Professional Ethics

Units: 4.5

Exploration of theories of social justice and equity underlying societal, political, and economic conditions which affect the leisure field. Strategies to identify and rectify injustices. Investigation of professional ethics. *Prerequisites: Graduate standing or consent of instructor.*

REC 6800 - Strategic Leadership in Leisure

Units: 4.5

Study of leadership of large, multifaceted organizations, including establishment of organizational structure, allocation of resources, and communication of strategic vision. Leisure's potential positive impact on current societal problems. *Prerequisites: REC 6000, REC 6100, REC 6200, REC 6300, REC 6400, REC 6500, REC 6700; Graduate standing or consent of instructor.*

REC 6901 - Graduate Synthesis

Units: 4.5

Problem definition, review of literature, data collection and analysis, and findings for developing a field-based project in leisure management. *Prerequisites: REC 6000, REC 6100, REC 6200, REC 6300, REC 6400, REC 6500, REC 6700.* Must be advanced to candidacy.

REC 6909 - Departmental Thesis

Units: 4.5

Development and writing of a research paper for submission to the department, which specifies its format. Supervision by a department committee, at least one of whom must be a member of the graduate faculty. Oral defense is required. *Prerequisites: REC 6000, REC 6100, REC 6200, REC 6300, REC 6400, REC 6500, REC 6700.* Must be advanced to candidacy.

REC 6999 - Issues in Recreation and Tourism

Units: 4

Readings, discussion, research, and applications on contemporary and/or significant issues in Recreation and Tourism. May be repeated for credit when content varies, for a maximum of 8 units.

Social Work

SW 4999 - Social Work as a Lifelong Career

Units: 4

Introduction to the nature of the Social Work profession to guide students in making an informed decision whether or not this is a career path that meets their goals. Employment opportunities in micro, mezzo, and macro settings after earning the MSW will be discussed. Not for credit in the Social Work major.

Social Work: Graduate

SW 5900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 8 units.

SW 6000 - Human Behavior and Social Environment I

Units: 4

Theoretical perspectives examining human development and behavior across the life span including the analysis of the influence of social, political, historical, and cultural variables. Processes associated with physiological, psychological, cognitive, and social development over the life span from birth through adolescence. *Co-requisites: SW 6010.*

SW 6001 - Human Behavior and Social Environment II

Units: 4

Builds upon knowledge regarding theoretical perspectives explaining human development and behavior across the life span including influences of social, political, historical, and cultural variables. Includes normative physiological, psychological, cognitive, and social development from young adulthood to death. *Prerequisites: SW 6000 Co-requisites: SW 6011.*

SW 6010 - Race, Gender and Inequality in Social Work Practice

Units: 4

The impact of race, racism, gender, sexism, and inequality in social work practice on diverse ethnic/racial populations. Effective problem-solving when confronted with institutional barriers and interpersonal conflicts in agency and community-based social work practice with minority populations. *Co-requisites: SW 6020.*

SW 6011 - Generalist Practice I

Units: 4

Theoretical and practice foundations for advanced social work. Prevention, crisis, and short-term intervention approaches focusing on translating theoretical understanding into multicultural service delivery and interventions with poor, vulnerable, and oppressed populations. *Prerequisites: SW 6010 Co-requisites: SW 6021.*

SW 6012 - Generalist Practice II

Units: 4

Assumptions, concepts, principles, and values of generalist practice examined from a cross-cultural perspective regarding professional relationships, social work roles, treatment processes, and service delivery models with individuals, families, groups, organizations, and communities. *Prerequisites: SW 6011 Co-requisites: SW 6022.*

SW 6013 - Generalist Practice III

Units: 4

Focus on macro-level practice in social work organizations and communities. Examination of administrative practice roles from the perspectives of strength, empowerment, and evidence. Assessment of community and agency capacities and needs. *Prerequisites: SW 6011 and SW 6012.*

SW 6020 - Field Instruction I

Units: 4

Supervised practice experience in a community social agency based on students' learning needs, interests, and option. Development of the foundation of generic interventive modalities in individuals, families, groups, and communities with emphasis on multicultural practice. *Co-requisites: SW 6010.* Two hrs. seminar, 16 hrs. agency placement.

SW 6021 - Field Instruction II

Units: 4

Continuation of supervised practice in a community social agency on an advanced level with individuals, families, groups, and communities with emphasis on multicultural practice. *Prerequisites: SW 6020 Co-requisites: SW 6011.* Two hrs. seminar, 16 hrs. agency placement.

SW 6022 - Field Instruction III

Units: 4

Continuation of supervised practice in community social agency on an advanced level of practice with individuals, families, groups, and communities with emphasis on multicultural practice. *Prerequisites: SW 6021 Co-requisites: SW 6012.* Two hrs. seminar, 16 hrs. agency placement.

SW 6030 - Social Welfare Policy : History and Philosophy

Units: 4

Theoretical and practice foundations for advanced social work with children, youth, women, and families. Prevention strategies, crisis and short-term approaches, specifically as they apply to key problems and issues faced by children, youth, women, and families. *Prerequisites: SW 6010 Co-requisites: SW 6020.*

SW 6032 - Social Welfare Policy: Research

Units: 4

The role of research in social work, the logic of research, the stages of underlying research process, various types of research designs, techniques of data collection and analysis, and strategies for evaluating service delivery in all areas of practice. *Prerequisites: SW 6010 Co-requisites: SW 6022.*

SW 6400 - Title IV-E Seminar

Units: 1

Culminating experience integrating policy, practice, and research relating to child protective services. Open to Title IV-E Program students only.

SW 6405 - Community Mental Health Seminar

Units: 1

Culminating experience integrating policy, practice, and research relating to mental health services. Open to CalSWEC II Program students only. Open to Title IV-E Program students only.

SW 6500 - Advanced Micro Practice: Children, Youth, and Families

Units: 4

Strategies of casework management with children, youth, and families. Principles of small and large group management, time management, coordination of services, and interagency cooperation. Issues of controlling, coordinating, directing, and planning services for clients in urban and suburban settings. *Prerequisites: SW 6010 Co-requisites: SW 6530.*

SW 6505 - Advanced Micro Practice: Community Mental Health

Units: 4

Strategies of casework management in a mental health context. Principles of small and large group management, time management, coordination of services, and interagency cooperation. Additional issues include controlling, coordinating, directing, and planning service delivery in urban and suburban communities. *Prerequisites: SW 6010 Co-requisites: SW 6530.*

SW 6510 - Advanced Mezzo Practice: Children, Youth, and Families

Units: 4

Theory and practice with ethnically, racially, and religiously diverse populations utilizing a multi-dimensional multi-cultural framework and case materials to analyze treatment issues and empowerment strategies for children, youth, and families. *Prerequisites: SW 6010 Co-requisites: SW 6531.*

SW 6515 - Advanced Mezzo Practice: Community Mental Health

Units: 4

Theory and practice with ethnically, racially, and religiously diverse populations utilizing a multidimensional, multicultural framework and case materials to analyze treatment issues and empowerment strategies in community mental health. *Prerequisites: SW 6010 Co-requisites: SW 6531.*

SW 6520 - Advanced Policy Practice: Children, Youth, and Families

Units: 4

Discussion of child, youth, and family policy in the United States and California. Focus on development of advanced skills in policy analysis and advocacy. *Prerequisites: SW 6030.*

SW 6525 - Advanced Policy Practice: Community Mental Health

Units: 4

Discussion of mental health policy in the United States and California. Focus on development of advanced skills in policy analysis and advocacy. *Prerequisites: SW 6030.*

SW 6530 - Field Instruction IV

Units: 4

Supervised social work practice in a community agency with focus on advanced direct practice skills and administrative program development areas with emphasis on multi-cultural practice. *Prerequisites: SW 6022 Co-requisites: SW 6909.* Two hrs. seminar, 16 hrs. agency placement.

SW 6531 - Field Instruction V

Units: 4

Continued supervised social work practice in a community agency at an advanced level in direct practice and administration within student's area of concentration. Preparation for professional employment with emphasis on multicultural practice.

Prerequisites: SW 6530 Co-requisites: SW 6909. Two hrs. seminar, 16 hrs. agency placement.

SW 6532 - Field Instruction VI

Units: 4

Continued supervised social work practice in a community agency at an advanced level in direct and indirect practice and administration within student's area of concentration. Preparation for professional employment emphasizing multicultural practice. *Prerequisites: SW 6531 Co-requisites: ACCT 6540.* Two hrs. seminar, 16 hrs. agency placement.

SW 6550 - Social Work Psychosocial Rehabilitation

Units: 4

Concepts of philosophy of psychosocial rehabilitation as the dominant modality in contemporary community mental health programs. Principles of crisis intervention, particularly in relation to the prevention of suicide and family violence. *Prerequisites: SW 6010 Co-requisites: SW 6530 or SW 6532.*

SW 6552 - Legal Issues in Social Work Practice

Units: 4

Legal aspects concerning children, family, and the aged, considering issues such as abortion, illegitimacy, right to treatment, mental health commitment procedures, rights of the elderly, children's rights, marriage, and divorce. Familiarity with legal assistance programs. *Prerequisites: SW 6010 Co-requisites: SW 6530 or SW 6532.*

SW 6553 - Assessment and Treatment of Substance Abuse

Units: 4

Social work practice with individual alcoholics and substance abusers, their family systems, and their community network. Awareness of the prevalence of alcoholism and substance abuse and significance for clinical social work practice. Dynamics and treatment of disease. *Prerequisites: SW 6010 Co-requisites: SW 6530 or SW 6532.*

SW 6554 - Occupational Social Work

Units: 4

Significance of work life factors on the biopsychosocial functioning of clients and the interface of person, family, and employment. Concepts of human growth and behavior, issues of engagement, diagnostic assessment, and intervention from the social work perspective. *Prerequisites: SW 6010 Co-requisites: SW 6530 or SW 6532.*

SW 6555 - School Social Work

Units: 4

Social work and the public school as a process in school-community-pupil relations. Attention to school as a social institution and its organization. Social work services in schools as a specialized field of social work practice. *Prerequisites: SW 6010 Co-requisites: SW 6530 or SW 6532.*

SW 6556 - Human Sexuality and Social Work

Units: 4

Exploration of human sexuality and how social workers relate to sexually-oppressed groups. Surveys a range of sexuality-related issues encountered in therapeutic relationships as part of administrative duties and at the policy level. *Prerequisites: SW 6010 Co-requisites: SW 6530 or SW 6532.*

SW 6558 - Supervision and Staff Development

Units: 4

Review of philosophy, objectives, principles, and methods of social work supervision, staff development, and consultation. Similarities and differences in the roles, knowledge, and skills required, emphasizing teaching-learning-evaluation components. *Prerequisites: SW 6010 Co-requisites: SW 6530 or SW 6532.*

SW 6559 - Youth and the Justice System

Units: 4

The juvenile justice system at the micro and macro level. Informal and formal intervention strategies, theoretical constructs, and policies impacting children, youth, and families within the juvenile justice system. The impact of poverty, racism and issues of diversity. *Prerequisites: SW 6010 Co-requisites: SW 6530 or SW 6532.*

SW 6560 - Family Violence Across the Lifespan

Units: 4

Advanced study of violence against children, partners, and the elderly. *Prerequisites: Successful completion of first two quarters of M.S.W. program.*

SW 6561 - Advanced Psychosocial Assessment and Diagnosis

Units: 4

Advanced study in psychosocial assessment and diagnosis of children, adolescents, and adults. Examination of person-in-environment and DSM IV-TR diagnosis. *Prerequisites: Successful completion of first two quarters of M.S.W. program.*

SW 6879 - Clinical/Casework Intervention with Military Personnel and their Families

Units: 4

Explores the many ways in which issues related to military service, combat and deployment affect service members and their families. A bio-psycho-social framework will be used in developing strategies to assist military service personnel and their families.

SW 6900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 16 units.

SW 6909 - Departmental Thesis

Units: 4

Developing and writing a research paper for submission to the department, which specifies its format. Supervision by a departmental faculty member. Oral defense is required. *Prerequisites: SW 6935, advancement to Candidacy, and consent of faculty advisor.*

SW 6910 - University Thesis

Units: 4

Completion of a formal research paper for submission to the university in the specified format. Supervision by a faculty committee, chaired by a regular member of the department. Oral defense required. *Prerequisites: SW 6932, advancement to Candidacy, and consent of faculty advisor.* Must be repeated once for credit for a total of 8 units.

SW 6932 - Qualitative and Quantitative Analysis

Units: 4

Social work practice research paradigms, models, and methods. Emphasis on quantitative and qualitative analyses in evaluation of social work practice. *Prerequisites: SW 6032.*

SW 6935 - Program Evaluation

Units: 4

Application of social work knowledge, values, and skills in planning and conducting an independent, substantive evaluation of a human services program. *Prerequisites: SW 6932.*

SW 6959 - Integrative Seminar

Units: 4

Capstone experience integrating knowledge in practice, policy, and research. Written project required. *Prerequisites: SW 6935, advancement to Candidacy, and consent of faculty advisor.*

SW 6962 - Writing for Social Work

Units: 2

Support of student writing by reviewing the basic tenets of APA format and working on the most important tenets of good writing: developing a clear thesis, accessing and citing published research, building content, and writing proficiently.

SW 6963 - Disabilities and Social Work

Units: 4

Social work practice with individuals and families across spectrum of disability including, genetic conditions, developmental delay, intellectual disability, physical disability, chronic medical conditions. Working with individuals in social service systems, such as regional centers, mental health, and primary medical care.

SW 6964 - Practice with Lesbian, Bi-Sexual, Gay, Transgendered and Questioning Populations

Units: 4

Introduction to the LGBTQ culture, exploration of the heterosexist aspects of society and the ethics and diversity issues that arise when working with the LGBT community. Review of the research and practice models that define homosexuality in relation to human sexuality and development.

SW 6965 - Practice with Latino Populations

Units: 4

The course is designed to enhance understanding of culturally competent practice by teaching a comprehensive Latino practice model and providing a selective review of best and promising practices across various Latino psychosocial and health problems.

SW 6966 - Social Work and Public Mental Health Across the Lifespan

Units: 4

Focus on the critical evaluation of multiple models for understanding, diagnosing, and documenting mental health problems across the lifespan. Models explored include the biomedical/DSM-IV, wellness and recovery, sociological, and non-western explanations of mental distress.

SW 6999 - Issues in Social Work

Units: 1-4

Readings, discussion, and research on contemporary and/or significant issues in social work. May be repeated for credit when content varies, for a maximum of 8 units.

Sociology

SOC 1000 - Introduction to Sociology

Units: 4

Introductory analysis of (a) the structure and functioning of human groups and (b) interrelations between groups; changes in (a) and (b). Not open to students with credit for SOC 1002.

SOC 1002 - Introduction to Sociology of Individual and Society

Units: 4

Introductory analysis of (a) the structure and functioning of human groups and (b) interrelationships between groups emphasizing influences on the individual; changes in (a) and (b). Not open to students with credit for SOC 1000.

SOC 3000 - Introduction to Sociological Research

Units: 4

Methodological problems in sociology in relation to the analysis of social organizations; research strategies; utilization of associated laboratory exercises to illustrate the important aspects of the research process in sociology. *Prerequisites: SOC 1000 (or SOC 1002).*

SOC 3100 - Seminar in Human Ecology

Units: 4

Introduction to theory and research on human ecosystems, with their interrelated components of population, environment,

technology, and organization. Forms of social organization which result from the interaction of the components. *Prerequisites: SOC 1000 (or SOC 1002).*

SOC 3200 - Social Demography

Units: 4

Population growth, distribution and composition. Introduction to population theories and analytic techniques. Individually supervised student projects. *Prerequisites: SOC 1000 (or SOC 1002).*

SOC 3230 - Sociology of Food

Units: 4

Social processes in what, how and why we eat with emphasis on food production and consumption as instruments of social differentiation, identities and power. *Prerequisites: SOC 1000 or consent of instructor.*

SOC 3310 - Sociological Theory

Units: 4

Critical analysis of the works of leading sociological theoreticians from the middle of the 19th century to the present. *Prerequisites: SOC 1000 (or SOC 1002).*

SOC 3410 - Sociology of the Family

Units: 4

The family with respect to its institutional, organizational and interactional character. Comparative study and analysis. *Prerequisites: SOC 1000 (or SOC 1002).*

SOC 3411 - Sociology of Gender

Units: 4

Focus on theory and research that explains the formation of gender identities and the institutionalization of gender inequality. Addresses the cultural and structural dimensions of gender patterns in private and public spheres. *Prerequisites: SOC 1000 (or SOC 1001, SOC 1002, SOC 2001 or SOC 2002).*

SOC 3412 - Marriage and Sex

Units: 4

Social norms and practices surrounding marriage, love, and sex in American society. Emphasis on premarital sex, mate selection, marital compatibility, marital power, and marriage in the middle and later years.

SOC 3413 - Sociology of Parenting

Units: 4

Exploration of practical and theoretical issues in contemporary parenting. Various approaches to childrearing examined and critiqued from a sociological perspective. Parent-child interaction, working mothers, nurturing fathers, single parenting, joint custody, family systems, blended families, and society's impact on parenting.

SOC 3415 - Sociology of the African American Family

Units: 4

Sociological analysis of the African American family and family life. Emphasis on sociological theory and research focusing on African American families and family life. Application of social systems approach emphasizing the interrelationships of social and institutional structure with the various subsystems of the African American family. *Prerequisites: SOC 1000 (or SOC 1002).*

SOC 3419 - Death and Dying

Units: 4

Trends and patterns in death and dying including historical perspectives, death in popular culture, demography of death, medical technology and dying, dying patient's perspective, survivors, and ethical dilemmas of death and dying.

SOC 3420 - Social Inequality

Units: 4

Nature, origins, forms, and consequences of structured inequalities. Focus on the material circumstances, life styles, and life chances of social classes, including minorities. *Prerequisites: SOC 1000 (or SOC 1002).*

SOC 3425 - Prejudice and Discrimination

Units: 4

Identifying overt, covert, and subtle discrimination, prejudice, stereotyping, and scapegoating on the basis of such factors as race, sex, class, disability. Legislative and social policy remedies, outcomes.

SOC 3431 - Seminar in World Development

Units: 4

Critical review of social change and ideas about development as they affect villagers, the urban poor, ethnic and racial minorities, and military and industrial elites. The conflict between the rich and the poor in an international context.

SOC 3480 - Violence and Conflict

Units: 4

Conduct, causes, and consequences of violent conflicts between individuals, groups, organizations, communities, societies. Resolution techniques utilizing violence, nonviolence, mediation, peacekeeping. *Prerequisites: SOC 1000 (or SOC 1002).*

SOC 3500 - Social Psychology

Units: 4

Current theory and research on the individual in society, small groups, complex organizations, and interpersonal interaction. Socialization, social structure, attitude formation, and group structure. *Prerequisites: SOC 1000 (or SOC 1002).*

SOC 3507 - Filipino American Communities

Units: 4

Sociological analysis of the construction of Filipino American communities. Emphasis on the economic realities of Filipino American communities in the Bay Area.

SOC 3510 - Sociology of Identity

Units: 4

The social nature and bases of identity formation in groups and individuals, including the changing identities of race, ethnicity, nationality, gender, sexuality, consumption, and class. Historical perspective on the problematization of identity resulting from shifts in social, cultural, economic, technological, and power relations in the United States and the world including the phenomenon of transnationalism.

SOC 3520 - Sociology of Race and Ethnic Relations

Units: 4

Examination of race and ethnic relations in historical and contemporary perspectives. Focus on the social formation of race and ethnic identity and on competing theories and debates about the institutionalization of the American ethno-racial hierarchy.

SOC 3525 - The African American Male

Units: 4

Sociological analysis of the adolescent African American male in the urban United States. Application of the social systems approach with special emphasis on the role of race, class, family, and institutional structures in the adolescent African American male. *Prerequisites: SOC 1000 (or SOC 1002).*

SOC 3550 - Filipino Labor/Immigration

Units: 4

Sociological analysis of Filipino labor and immigration. The impact on work and employment of global restructuring and postmodern condition on Filipinos particularly in North America.

SOC 3555 - Asian American Family Patterns

Units: 4

(See ES 3555 for course description.)

SOC 3610 - Sociology of Religion

Units: 4

Functions of religion in society, the interrelations between religion and social structure, religious authority and leadership, the nature of religious movements. *Prerequisites: SOC 1000 (or SOC 1002).*

SOC 3620 - Sociology of Education

Units: 4

Institutional character of education; the relationship of education as a social institution to aspects of political, economic and family organization; social relations within the school; school culture and roles. *Prerequisites: SOC 1000 (or SOC 1002).*

SOC 3700 - Introduction to Social Services

Units: 4

Introduction to the contemporary and historical nature of social service agencies in the United States, and the delivery of services to children, families, the elderly, and other populations in need. Direct and indirect roles of workers in the social services and the profession of social work.

SOC 3710 - Social Policy

Units: 4

Contemporary and historical nature of social policy in the United States, emphasizing at-risk populations and disenfranchised groups. Social problems such as homelessness, child abuse, poverty, and immigration.

SOC 3720 - Human Behavior in the Social Environment

Units: 4

Primary theories of human behavior and developmental stages across the life span. Special attention to the interplay between human development and social environment.

SOC 3730 - Juvenile Delinquency

Units: 4

Juvenile justice system and the theories seeking to explain juvenile delinquency. Various methods used to prevent, treat and rehabilitate youthful offenders. *Prerequisites: SOC 1000 (or SOC 1002).*

SOC 3745 - Social Deviance

Units: 4

Formation and composition of various subcultures whose norms and values conflict with those of wider society. *Prerequisites: SOC 1000 (or SOC 1002).*

SOC 3750 - Alcohol and Drug Abuse

Units: 4

Social issues involved in alcohol and drug abuse with assessment of sociological theories of drug abuse and prevention. Social problems associated with misuse of alcohol, narcotics, and other drugs.

SOC 3880 - Work and Professions

Units: 4

Research and theory on the social transformation of work and professions, structure of labor markets, occupational choice, work and social stratification, historical division of labor. Significance of race, ethnicity, gender, and age in relation to work and professions. *Prerequisites: Upper-division standing and SOC 1000 (or SOC 1002); or consent of instructor.*

SOC 3890 - Sociology of Organizations

Units: 4

The structure and social dynamics of organizations. Social sources of stratification, cohesion, conflict and change within varying contexts such as business, government, religion, education, and politics. *Prerequisites: Upper-division standing and SOC 1000 (or SOC 1002); or consent of instructor.*

SOC 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least a 2.0 GPA; departmental approval of activity.* May be repeated for credit, for a maximum of 8 units. Only a maximum of 4 units may be applied to the Sociology major; only a maximum of 4 units may be applied to the Sociology minor. *CR/NR grading only.*

SOC 3999 - Issues in Sociology and Social Services

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in sociology and social services. May be repeated once for credit when content varies, for a maximum of 8 units.

SOC 4111 - Methods of Sociological Research I

Units: 4

The nature and application of the scientific method in social research. The use of different techniques for specific problems; descriptive and analytical procedures employing the statistical, the historical, and comparative methods. Use of such research instruments as the interview, the questionnaire, and observation. Analysis of data and reporting of results. Individual projects.

Prerequisites: SOC 1000 (or SOC 1002); STAT 1000.

SOC 4112 - Methods of Sociological Research II

Units: 4

The design of sociological studies. Advanced problems of sampling and measurement. Individual projects and instruction.

Prerequisites: SOC 4111.

SOC 4400 - Sociology of Culture

Units: 4

Sociological analysis of historical and contemporary culture with attention to issues of culture and power, production of culture, status and cultural consumption, audience reception, and social change. *Prerequisites: Upper-division standing and SOC 1000 (or SOC 1002); or consent of instructor.*

SOC 4450 - Urban Sociology

Units: 4

Development of metropolitan areas as distinctive patterns; problems presently facing this population in urban growth, transportation, race relations, poverty, housing, and education. *Prerequisites: SOC 1000 (or SOC 1002).*

SOC 4716 - Social Work Theories and Methods

Units: 4

Methods and skills of professional practice in preparation for Field Practicum, with emphasis on individuals, small groups, and communities from a transcultural perspective. Techniques of casework, group work, and community organization. *Prerequisites: SOC 3700.*

SOC 4718 - Field Practicum

Units: 4

Placement of students in suitable social services agencies with supervised instruction. Twelve hours per week required in placement. *Prerequisites: Senior standing, SOC 3700, SOC 4716, and consent of instructor. Co-requisites: SOC 4719. Only open to Sociology majors with Sociology, Social Services Option, B.A. Must be repeated once. CR/NC grading only.*

SOC 4719 - Field Practicum Seminar

Units: 2

Seminar to be taken concurrently with SOC 4718. Relates field practicum experiences to social work practice and principles.

Prerequisites: Senior standing, SOC 3700, SOC 4716, and consent of instructor. Co-requisites: SOC 4718. Only open to Sociology majors with Sociology, Social Services Option, B.A. Must be repeated once.

SOC 4720 - Medical Sociology

Units: 4

Sociocultural and interactional components in the etiology and treatment of illness (physiological, psychosomatic and "mental"); medical and paramedical professions. *Prerequisites: SOC 1000 (or SOC 1002).*

SOC 4730 - Police and Society

Units: 4

The role police play as agents of formal social control. Emphasis on the relationship between police management and social change.

SOC 4750 - Child Welfare

Units: 4

Trends in public policy regarding programs for the protection and care of the child in American society. Conditions pertinent to the socialization of the child; the implications of these conditions for the development of such programs as foster care, adoptions, institutions, school social work, and corrections. *Prerequisites: SOC 1000 (or SOC 1002).*

SOC 4790 - Social Control and Society

Units: 4

Methods and strategies by which societies regulate behavior. Variation in social control by social location, with an emphasis on race, class and gender. Implications for justice, equality and civil rights. *Prerequisites: SOC 1000 or consent of instructor.*

SOC 4800 - Topics Seminar

Units: 4

Contributions of sociological theories, methods, and perspectives to selected topics beyond regular courses. Requires individual research. *Prerequisites: Upper-division standing and SOC 1000 (or SOC 1002); or consent of instructor.* May be repeated once for credit when content varies, for a maximum of 8 units.

SOC 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

Sociology: Graduate

SOC 6111 - Advanced Sociological Research Methods I

Units: 4

Application of scientific methods to the analysis of social phenomena, methodological orientations in sociology, types of research

procedure, nature of sociological variables and their statistical treatment. *Prerequisites: "Classified Graduate" standing and consent of instructor.* Two hrs. seminar; 4 hrs. lab.

SOC 6112 - Advanced Sociological Research Methods II

Units: 4

Development of individual projects, illustrating study designs, applications of scientific method in the collection, analysis, and presentation of data at advanced levels. *Prerequisites: "Classified Graduate" standing; SOC 6111.* Two hrs. seminar; 4 hrs. lab.

SOC 6311 - Seminar in Sociological Theory I

Units: 4

Advanced study of classical sociological theory and related contemporary developments. *Prerequisites: "Classified Graduate" standing or consent of instructor.*

SOC 6312 - Seminar in Sociological Theory II

Units: 4

Contemporary thematic and conceptual issues in the study of class, gender, race, and other categories of difference and inequality. Application of issues to development of students' interests and thesis topics. *Prerequisites: "Classified Graduate" standing; SOC 6311.*

SOC 6800 - Topics Seminar

Units: 4

Presentation of selected topics beyond regular courses. Subject will vary from time to time. *Prerequisites: "Classified Graduate" standing and consent of instructor.* May be taken three times for credit when content varies, for a maximum of 16 units.

SOC 6898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least a 3.0 GPA; departmental approval of activity.* May be repeated for credit, for a maximum of 8 units. A maximum of 4 units will be accepted toward the Sociology major.

SOC 6900 - Independent Study

Units: 1-4

SOC 6908 - Thesis Development

Units: 1-4

Development and writing of a research paper in preparation for completing a departmental or university thesis. Supervision by a faculty committee, chaired by a regular member of the department. *Prerequisites: Graduate standing; must be advanced to candidacy; must have secured thesis committee chair's written approval.* May be repeated once for credit, for a maximum of 8 units.

SOC 6909 - Departmental Thesis

Units: 1-4

Completion of a research paper for submission to the department, which specifies its format. Supervision by a faculty committee, chaired by a regular member of the department. Oral defense normally required. *Prerequisites: Graduate standing; SOC 6908.*

SOC 6910 - University Thesis

Units: 1-8

Completion of a formal research paper for submission to the university in the specified format. Supervision by a faculty committee, chaired by a regular member of the department. Oral defense normally required. *Prerequisites: Graduate standing; SOC 6908.*

SOC 6999 - Issues in Sociology

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in sociology. May be repeated for credit when content varies, for a maximum of 8 units.

Speech Pathology and Audiology

SPPA 2850 - Introduction to Communication Disorders

Units: 4

The nature of speech and language pathology. Acquisition of speech and language by children. Communication through the lifespan. Deviations from normal speech and language patterns, e.g., disorders of language, articulation, voice, language difference in a multicultural society, and stuttering.

SPPA 3852 - Speech, Language and Communication Development Across the Lifespan

Units: 4

Study of the acquisition and development of speech, language and communication from infancy through adulthood in typically developing individuals. Topics are phonology, articulation, language, pragmatic skills, nonverbal communication, and development and changes in these abilities across the lifespan.

SPPA 3854 - Anatomy and Physiology of Speech

Units: 4

Study of the anatomy, physiology, and neurology of the speech mechanism; respiration, phonation, articulation, and resonance with emphasis on normal processes. Must complete with a grade of "B" (3.0) or better to meet prerequisites for SPPA 4000 level courses. *Prerequisites: SPPA 2850, SPPA 3852; BIOL 1001, BIOL 2010.* May be repeated once for credit for a maximum of 8 units.

SPPA 3855 - Phonetics

Units: 4

Study of physiologic foundations of vowels, consonants, diphthongs in American English. Development of ability to transcribe phonetically speech dialects and various articulatory patterns. Must complete with a grade of "B" (3.0) or better to meet prerequisites for SPPA 4000 level courses. May be repeated once for credit for a maximum of 8 units.

SPPA 3856 - Observation of Clinical Procedures in Communicative Disorders

Units: 2

Supervised observations, discussions, and written critiques of diagnosis and treatment sessions. Must be taken once during first year in the major. May be repeated once for credit for a maximum of 4 units; only two units will apply to the major. *CR/NC grading only.*

SPPA 3859 - Theory and Practice of Audiology I

Units: 4

Anatomy and physiology of the outer and middle ear systems with emphasis on their clinical correlates; the nature of sound and hearing. Audiology as a profession. Practical experience with diagnostic audiologic evaluation and interpretation. Must complete with a grade of "B" (3.0) or better to meet prerequisites for SPPA 4000 level courses. May be repeated once for credit for a maximum of 8 units.

SPPA 3860 - Theory and Practice of Audiology II

Units: 4

Anatomy and physiology of inner ear and auditory pathways, with emphasis on clinical correlates. Theories of hearing and methods for screening audiologic function. Practical experience with audiologic evaluation and interpretation. *Prerequisites: SPPA 3859.*

SPPA 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least a 2.0 GPA; departmental approval of activity.* May be repeated for credit, for a maximum of 8 units. Not applicable to the Speech Pathology major; a maximum of 2 units will be accepted toward the Speech Pathology minor. *CR/NC grading only.*

SPPA 3999 - Issues in Speech Pathology and Audiology

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in speech pathology and audiology. May be repeated for credit when content varies, for a maximum of 8 units.

SPPA 4120 - Aural Rehabilitation for Au.D.

Units: 4

Ecological, interactive approaches to preventing and/or minimizing limitations on everyday living resulting from impairment in auditory function. Current clinical practices in hearing aid fitting, cochlear implants, assistive devices and hearing protection. *Prerequisites: SPPA 3854, SPPA 3855 and SPPA 3859, each with a "B" (3.0) or better. Open only to CSD students in Au.D. preparation track.*

SPPA 4852 - Clinical Methods and Procedures in Communicative Disorders

Units: 3

Basic principles of client treatment and management, including structuring the therapy session, designing therapy hierarchies, collecting data, working with families, reinforcing correct behavior and documenting outcomes. *Prerequisites: Senior standing. SPPA 3854, SPPA 3855 and SPPA 3859, each with a "B" (3.0) or better.* May be repeated once for credit for a maximum of 6 units; only 3 units will apply to the major. *A-F grading only.*

SPPA 4854 - Diagnosis of Speech and Language Disorders

Units: 4

Theory and practice in the assessment of speech and language disorders. Lab observation assignment required. *Prerequisites: SPPA 2850, SPPA 3852. SPPA 3854, SPPA 3855 and SPPA 3859, each with a "B" (3.0) or better; HDEV 4110 or PSYC 4420; 20 hours of supervised observation; and senior or graduate standing.*

SPPA 4856 - Practicum in Speech-Language Pathology

Units: 3

Development, implementation and evaluation of individualized therapy programs for clients in the Speech, Hearing and Language Clinic. Practice in report writing and oral case presentations. *Prerequisites: SPPA 3854, SPPA 3855, SPPA 3859, SPPA 4852 or SPPA 6052; and SPPA 4854 or SPPA 6854, each with a "B" (3.0) or better and permission of department.*

SPPA 4859 - Evidence-based Practice in Communicative Sciences and Disorders

Units: 4

Contemporary understanding of evidence-based practice in speech pathology and audiology. Combination of research evidence, clinician expertise, client values, and individual client attributes to guide decision-making in everyday clinical practice. *Prerequisites: SPPA 3854, SPPA 3855, SPPA 3859, SPPA 4852 or SPPA 6052, each with a "B" (3.0) or better and senior or graduate standing.*

SPPA 4861 - Hearing Assessment: Instrumentation and Behavioral

Units: 5

Theory and application of the fundamentals of pure tone and speech audiometric procedures basic to identification audiometry and differential diagnosis of peripheral auditory disorders. *Prerequisites: SPPA 3854, SPPA 3855 and SPPA 3859, each with a "B" (3.0) or better.*

SPPA 4862 - Organic and Low Incidence Speech Disorders

Units: 4

Speech and communication disorders of low incidence in the population or individuals with organic etiologies. Characteristics, diagnosis and treatment for persons with voice disorders, cerebral palsy, cleft palate, head and neck cancer and other syndromes. *Prerequisites: SPPA 3854, SPPA 3855 and SPPA 3859, each with a "B" (3.0) or better. Senior or graduate standing.*

SPPA 4863 - Articulation and Phonological Disorders

Units: 4

Systematic study of children's speech disorders resulting from deviant articulation and/or phonological rule systems. Critical review of articulation and phonological assessments, theories, and treatments. *Prerequisites: SPPA 3854, SPPA 3855 and SPPA 3859, each with a "B" (3.0) or better; or consent of instructor.*

SPPA 4865 - Language Disorders in Children

Units: 4

Causes and treatment of language disorders in children. Students observe treatment; learn to collect and analyze language samples, and to write training programs. *Prerequisites: SPPA 3854, SPPA 3855 and SPPA 3859, each with a "B" (3.0) or better. SPPA 3852; PSYC 1000; HDEV 4110 or PSYC 4220; and senior or graduate standing.*

SPPA 4866 - Neurocognitive Communication Disorders

Units: 4

Introduction to cognition, its components and disorders. Acquired neurogenic cognitive-communicative disorders such as aphasia, traumatic brain injury, right hemisphere syndrome, and dementia. Discussion of screening, assessment, and intervention for persons with cognitive-communicative disorders. *Prerequisites: SPPA 3854, SPPA 3855 and SPPA 3859, each with a "B" (3.0) or better. SPPA 4869.*

SPPA 4867 - Speech Science

Units: 4

Fundamentals of sound production and transmission as related to speech. Theory of speech production, perception, acoustic and physiologic phonetics, and analysis of the acoustic properties of speech. *Prerequisites: SPPA 3854, SPPA 3855 and SPPA 3859, each with a "B" (3.0) or better; and senior or graduate standing.*

SPPA 4868 - Cultural and Linguistic Diversity

Units: 4

Knowledge and skills essential for competently serving diverse clients with communication disorders. Basic information on health disparities, bilingualism and second language acquisition, principles of least-biased assessment, culturally sensitive interviewing and counseling strategies, conflict resolution, and culturally valid treatment techniques. *Prerequisites: SPPA 3854, SPPA 3855 and SPPA 3859, each with a "B" (3.0) or better. SPPA 4852 or SPPA 6052, and senior or graduate standing.*

SPPA 4869 - Neuroanatomy and Neurophysiology of the Speech, Language and Hearing Mechanism

Units: 4

Structural and functional descriptions and neurophysiology of the central and peripheral nervous system as it relates to normal development and to communication sciences and disorders. *Prerequisites: SPPA 3854, SPPA 3855 and SPPA 3859, each with a "B" (3.0) or better. SPPA 4852 or SPPA 6052, and senior or graduate standing.*

SPPA 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

Speech-Language Pathology: Graduate

SPPA 6000 - Research Methods in Communicative Sciences and Disorders

Units: 4

Applied research methods in the field of communicative disorders, including literature search techniques, research designs, statistical tests, and scholarly report preparation. Required individual research project and written assignment. *Prerequisites: SPPA 4859 and graduate standing Co-requisites: SPPA 4856 or SPPA 6056.*

SPPA 6010 - Advanced Speech and Hearing Science

Units: 2

Selected topics in acoustic and physiological phonetics, speech perception and psychoacoustics with laboratory application in the analysis of normal and disordered speech and voice patterns. *Prerequisites: SPPA 4867; and graduate standing.*

SPPA 6020 - Vocal Pathology and Rehabilitation

Units: 4

Assessment procedures for differentiating various organic and non-organic laryngeal dysfunctions in adults and children and selection and application of appropriate treatment methods. *Prerequisites: SPPA 4862 and SPPA 4867; and graduate standing.*

SPPA 6030 - Clinical Organization and Management

Units: 2

Course description: Principles and procedures underlying patient enrollment, family counseling, and utilizing allied professions for adults and children in clinic and school settings. Organizing and administering speech and language programs following State and Federal regulations. *Prerequisites: Graduate standing and consent of instructor.*

SPPA 6040 - Advanced Seminar in Speech, Language and Communication Disorders

Units: 2

Selected topics in speech, language and hearing. Topics include autism, bilingualism, child language disorders, deafness, fluency, evaluation and management of hearing loss, acquired speech and language disorders. *Prerequisites: Graduate standing.* May be repeated two times for credit when content changes for a maximum of 6 units.

SPPA 6050 - Neurogenic Motor Speech Disorders: Adults and Children

Units: 4

Evaluation and treatment of the dysarthrias, apraxia of speech and speech and voice problems associated with acquired and developmental neuropathologies in children and adults. Evidence-based practice in assessment and treatment. *Prerequisites: SPPA 4852 or SPPA 6052; SPPA 4866; and graduate standing.*

SPPA 6052 - Clinical Methods and Procedures in Communicative Disorders

Units: 3

Basic principles of client treatment and management, including structuring the therapy session, designing therapy hierarchies, collecting data, working with families, reinforcing correct behavior, and documenting outcomes. Course includes 10 hours of supervised clinical observation. *Prerequisites: Graduate standing.*

SPPA 6055 - Aphasia and Related Neurogenic Language Disorders

Units: 4

Analysis of historical and current information relating brain dysfunction and language disorders. Observation; administering and interpreting standardized and nonstandardized assessment procedures, selecting treatment techniques, and collecting data for evidence-based practice treatment decisions. *Prerequisites: SPPA 4852 or SPPA 6052 and SPPA 4866 or its equivalent, and graduate standing.*

SPPA 6056 - Practicum in Speech-Language Pathology: Treatment

Units: 2

Development, implementation and evaluation of individualized therapy plans administered in both individual and group settings.

Report writing and oral case presentations. *Prerequisites: SPPA 4852 or SPPA 6052 and SPPA 4854 or SPPA 6854, both with a "B" (3.0) or better; and graduate standing.* May be repeated three times for credit, for a maximum of 8 units.

SPPA 6057 - Practicum in Speech-Language Pathology: Assessment

Units: 2

Supervised clinical diagnosis of speech-language disorders including history taking, test administration, data analysis, patient counseling, oral and written case presentation. *Prerequisites: SPPA 6000; SPPA 4852 or SPPA 6052; graduate standing.*

SPPA 6060 - Advanced Study of Language Disorders in Children

Units: 4

Evaluation and treatment procedures applicable to clinic and classroom settings. Emphasis on the evaluation of semantic and pragmatic functions and the establishment of functional language. *Prerequisites: SPPA 4852 or SPPA 6052; SPPA 4865; and graduate standing.*

SPPA 6064 - Fluency Disorders

Units: 4

Theories of etiology and therapeutic approaches to stuttering and cluttering disorders in adults and children. *Prerequisites: SPPA 4852 or SPPA 6052; and graduate standing.*

SPPA 6066 - Clinical Internship in Speech-Language Pathology

Units: 6

Field placement in supervised and approved settings such as public schools, hospitals, and community speech-language and hearing clinics. *Prerequisites: SPPA 4863, SPPA 4866, SPPA 6000, SPPA 6020, SPPA 6050, SPPA 6056, SPPA 6057, SPPA 6060, SPPA 6064; Internship Preference Form filed; and graduate standing.* Must be repeated once for credit, for a maximum of 12 units.

SPPA 6070 - Augmentative/Alternative Communication-Assistive Technology for Speech-Language Pathologists

Units: 4

Principles of augmentative/alternative communication for both children and adults. Hardware, software, and peripheral equipment for assessment, system fittings, and intervention. Open to SPPA graduate students and Speech Pathology professionals. *Prerequisites: SPPA 4856 or SPPA 6056; SPPA 4865; and graduate standing.*

SPPA 6080 - Counseling Individuals with Speech, Language and Hearing Disorders

Units: 4

Counseling theory, models, processes, and strategies. Application of counseling strategies to individuals who present a variety of communicative disorders, and to the families of these individuals to assist them in living with communication disorders. *Prerequisites: SPPA 4852 or SPPA 6052, and graduate standing.*

SPPA 6156 - Practicum in Audiologic Assessment

Units: 2

Supervised clinical diagnosis of hearing disorders including history taking, test administration, data analysis, patient counseling, oral and written case presentation. *Prerequisites: SPPA 4852 or SPPA 6052; SPPA 4861; and graduate standing.*

SPPA 6160 - Audiological Rehabilitation

Units: 4

Advanced study of the issues facing clinicians when providing audiological rehabilitation services in adult clinical settings. Emphasis on group formation and communication strategies training. Guided practical experience in group audiological rehabilitation. Two hrs. lect., 4 hrs. lab.

SPPA 6220 - Dysphagia in Adults and Children

Units: 4

Principles and evidence-based clinical guidelines for screening, assessment, and treatment of dysphagia in adults and children. Anatomy and physiology of normal swallowing, bedside and instrument-based assessment of swallowing disorders, behavioral and instrument-based treatment techniques, and ethical issues in clinical practice. *Prerequisites: SPPA 4867, SPPA 4856 or SPPA 6056; and graduate standing.*

SPPA 6223 - Early Language Assessment and Intervention

Units: 2

Provides information and develops skills for working with the birth to 3 population at risk for speech and language delays and/or disorders including: children of substance abuse pregnancies, premature birth, chromosomal disorders, developmental delay, and pervasive developmental disorders. Topics include characteristics of these populations, appropriate assessment procedures, family-centered services, and transdisciplinary approaches. *Prerequisites: SPPA 4856 or SPPA 6056; SPPA 6060. Only open to SPPA majors.*

SPPA 6224 - Issues in Ethics

Units: 2

The American Speech-Language-Hearing Association's (ASHA) Code of Ethics with specific discussion on conflict of interest, the effect of managed care, and insurance reimbursement. *Prerequisites: SPPA 4852 or SPPA 6052. Co-requisites: SPPA 4856 or SPPA 6056.*

SPPA 6228 - School-based Issues in Speech-Language Pathology

Units: 2

Issues pertaining to public school setting: IEPs, fair hearings, reports, school personnel, federal and state regulations, qualification standards, dismissal criteria, bilingualism and second language acquisition, best practices, group treatment, data collection, working with parents and teachers, and behavior management. *Prerequisites: SPPA 4852 or SPPA 6052, and graduate standing.*

SPPA 6229 - Medical Speech-Language Pathology

Units: 2

Issues pertaining to medical settings: acute, subacute and chronic care, hospice, tracheostomy tubes and vents, genetic syndromes, unusual medical diagnoses, infection control, IHPs, chart documentation, productivity standards, federal and state regulations, best practices, and working with medical professionals as a team. *Prerequisites: SPPA 4852 or SPPA 6052, and graduate standing.*

SPPA 6854 - Diagnosis of Speech and Language Disorders

Units: 4

Theory and practice in the assessment of various pathologies of speech and language. *Prerequisites: Graduate standing and consent of instructor.* Two hrs. lect., 6 hrs. lab.

SPPA 6898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off campus paid or volunteer activities. *Prerequisites: at least a 3.0 GPA; departmental approval of activity. Not applicable to the Speech-Language Pathology, M.S.* May be repeated once, for a maximum of 8 units.

SPPA 6900 - Independent Study

Units: 1-5

SPPA 6910 - University Thesis

Units: 2-8

Development and writing of a formal research paper for submission to the University in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See also, "University Thesis Writing Guide," www.csueastbay.edu/thesiswritingguide.) *Prerequisites: Graduate standing. Maximum of 8 units per student.*

SPPA 6999 - Issues in Speech Pathology and Audiology

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in speech pathology and audiology. May be repeated for credit when content varies, for a maximum of 8 units.

Statistics

STAT 1000 - Elements of Probability and Statistics

Units: 5

Descriptive statistics (measures of central tendency, dispersion, correlation), elementary discrete probability distributions. Introduction to tests of statistical hypotheses. *Prerequisites: Completion of ELM requirement.* Not open to students with credit for STAT 2010 or STAT 2008. Must complete course with a grade of "C-" or better in order to earn General Education, Area B4, credit.

STAT 2010 - Elements of Statistics for Business and Economics

Units: 5

Introduction to modern probability, descriptive statistics, estimation, hypothesis testing, and linear regression. Applications to business and economics. *Prerequisites: Completion of ELM requirement.* Not open to students with credit for STAT 1000 or 2008. Must complete course with a grade of "C-" or better in order to earn General Education, Area B4, credit.

STAT 3010 - Statistical Methods in the Social Sciences

Units: 4

Standard scores, t scores, ranked data, linear regression, correlation, measures of association, the normal distribution and its uses, paired comparisons, the uses of chi-squared, and introduction to design of experiments. *Prerequisites: STAT 1000 or equivalent.*

STAT 3031 - Statistical Methods in Biology

Units: 4

Basic probability and statistical concepts. Introduction to the analysis of variance, correlation, and simple linear regression. Nonparametric techniques with application to biology. *Prerequisites: MATH 1130 or consent of instructor.*

STAT 3050 - Statistics: from Data to Decisions

Units: 4

Fundamentals of statistical reasoning illustrated with real data from such fields as biology, psychology, geology, anthropology, physics, medical technology. How to decide on an appropriate statistical method. Graphical methods, computer assisted analysis of data. Drawing conclusions. Projects with written reports. *Prerequisites: STAT 1000 or equivalent.* Not for credit in Statistics B.S. degree. Acceptable for credit in statistics minor.

STAT 3088 - Gambling and Games of Chance

Units: 4

A survey of popular gambling games, including dice games, card games, and horse racing. Discussion of odds and probabilities, and how to turn those into gambling strategies. *Prerequisites: Lower division quantitative reasoning, General Education Area B4, satisfied.* Not for credit in Statistics B.S. degree.

STAT 3401 - Introduction to Probability Theory I

Units: 4

The theory of probability with applications to science and engineering. Sample spaces; random variables; joint, marginal, conditional distributions; expectations; important distributions (binomial, Poisson, normal, etc.); and moment generating functions.

STAT 3402 - Introduction to Probability Theory II

Units: 4

Generating functions and multivariate distributions. Conditioning. Chebyshev inequality and limit theorems. Multidimensional transformations of random variables. Derivation of t and F distributions. Uses of probability theory in mathematical statistics. *Prerequisites: STAT 3401 or STAT 4412.*

STAT 3502 - Statistical Inference I

Units: 4

Random variables, sampling distributions (binomial, Poisson, normal, exponential), conditional probability. Estimation, hypothesis testing. Computer-aided computations. Topics include: t-tests, correlation, regression; proportions, chi-squared; ANOVA. *Prerequisites: MATH 1305.*

STAT 3503 - Statistical Inference II

Units: 4

General linear hypothesis with emphasis on design and analysis of experiments. Data from science, engineering, and quality

management. Factorial designs: random effects, nesting. Optional topics: incomplete blocks, missing data, analysis of covariance. Computer-aided analysis. *Prerequisites: STAT 3502 or STAT 3601.*

STAT 3510 - Sampling Procedures for Surveys

Units: 4

Detailed investigation of sampling methods. Design and comparisons of stratified, systematic, and cluster sampling procedures. Techniques of multistage and multiphase sampling. Emphasis on applications to social science. *Prerequisites: STAT 1000 or equivalent.*

STAT 3601 - Statistics and Probability for Science and Engineering I

Units: 4

Basic probability rules (independence, Bayes' Theorem), distributions (binomial, Poisson, normal, exponential), reliability. Descriptive, inferential statistics (control charts, estimation, hypothesis testing: one, two samples), correlation, regression. Emphasizes: computer analysis, simulation; science, engineering applications. *Prerequisites: MATH 1305.* Cross-listed INDE 3601. Not open to students with credit for STAT 3502/ENGR 3502.

STAT 3602 - Statistics and Probability for Science and Engineering II

Units: 4

General linear model with emphasis on design and analysis of experiments. Fixed and random effects and nested models. Power and sample size considerations. Emphasizes: computer analysis, simulation; science, engineering applications. *Prerequisites: STAT 3502 or STAT 3601/INDE 3601.* Cross-listed INDE 3602. Not open to those with credit for STAT 3503.

STAT 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least 2.0 GPA; departmental approval of activity.* May be repeated for credit, for a maximum of 8 units. A maximum of 4 units will be accepted toward the Statistics major.

STAT 3900 - Data Analysis Using Statistical Packages

Units: 4

Using computer packages (e.g., SPSS, SAS) and interpreting output. Data preparation, descriptive statistics, graphs, checks for normality, t-tests, F-tests, ANOVA, cross tabulations, chi-squared tests, correlation, and report preparation. *Prerequisites: A previous course in statistics.*

STAT 3910 - Statistical Software Usage

Units: 4

Using program code in a statistical software package (e.g., SPSS, R or SAS), producing reformatted data and statistical analysis. Topics may include graphics, creating and managing data files, and simulations. *Prerequisites: A previous Statistics course and skill in computer usage.*

STAT 3999 - Issues in Statistics

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in statistics. May be repeated for credit when content varies, for a maximum of 8 units.

STAT 4000 - Analysis of Variance in the Behavioral Sciences

Units: 4

Review of elementary analysis of variance. Factorial analysis of variance, multiple comparisons, and repeated measures designs. *Prerequisites: STAT 3010 or STAT 3031.*

STAT 4013 - Statistics, Data Analysis, and Probability

Units: 4

(See MATH 4013 for course description.)

STAT 4401 - Introduction to Stochastic Processes

Units: 4

Theory of stochastic models with applications to science and engineering. Markov processes. Elementary birth-death processes, queues. Limit theorems. Computer simulation. Applications: e.g., inventory models, reliability, epidemiology. *Prerequisites: STAT 3401/MATH 3401 or STAT 3601/INDE 3601.*

STAT 4412 - Probability Theory

Units: 4

Same spaces; random variables, joint, marginal, conditional distributions; expectations for modeling data; related use of computer packages; moment generating functions; transforming a random variable. *Prerequisites: MATH 1305.* Not open to students with credit for STAT 3401.

STAT 4515 - Applied Multivariate Analysis

Units: 4

MANOVA, repeated measures designs, discriminant functions. May include factor analysis, canonical correlation, and cluster analysis. Computer intensive with special emphasis on treatment of actual data. Written reports required. *Prerequisite or Co-requisite: Prerequisites or corequisites: STAT 3010 and STAT 3900.*

STAT 4601 - Regression

Units: 4

Computational methods in regression, including variable construction, and ANOVA. Selection methods. Attention to model assessment, graphical techniques, and assumption checking. Emphasis on real data from science, engineering, and business. Computer-assisted analysis. Report writing. *Prerequisite or Co-requisite: STAT 3503 or STAT 4000.*

STAT 4603 - Operations Research II

Units: 4

Theory of stochastic models with applications to engineering. Markov processes, queues, birth-death processes. Operations research applications. Inventory models, risk theory, fatigue failure, and reliability. Computer simulation. *Prerequisites: STAT 3602/INDE 3602.* Not open to students with credit for STAT 3602/INDE 3602 or STAT 4401.

STAT 4610 - Introduction to Nonparametric Statistical Methods

Units: 4

Nonparametric methods and distribution-free tests. Sign, Wilcoxon, rank-correlation, independence and randomness tests. Approximate distributions under the null hypothesis, treatment of ties, some estimation procedures. Emphasis on social science data. *Prerequisites: STAT 3010.*

STAT 4860 - Undergraduate Seminar

Units: 4

Seminar in probability and/or statistics on topics extending beyond regular courses. Variable content, units, and prerequisites specified at the time of offering. May be repeated two times for credit when content varies, for a maximum 12 units.

STAT 4861 - Undergraduate Seminar

Units: 4

Seminar in probability and/or statistics on topics extending beyond regular courses. Variable content, units, and prerequisites specified at the time of offering. May be repeated two times for credit when content varies, for a maximum 12 units.

STAT 4862 - Undergraduate Seminar

Units: 4

Seminar in probability and/or statistics on topics extending beyond regular courses. Variable content, units, and prerequisites specified at the time of offering. May be repeated two times for credit when content varies, for a maximum 12 units.

STAT 4863 - Undergraduate Seminar

Units: 4

Seminar in probability and/or statistics on topics extending beyond regular courses. Variable content, units, and prerequisites specified at the time of offering. May be repeated two times for credit when content varies, for a maximum 12 units.

STAT 4864 - Undergraduate Seminar

Units: 4

Seminar in probability and/or statistics on topics extending beyond regular courses. Variable content, units, and prerequisites specified at the time of offering. May be repeated two times for credit when content varies, for a maximum 12 units.

STAT 4865 - Undergraduate Seminar

Units: 4

Seminar in probability and/or statistics on topics extending beyond regular courses. Variable content, units, and prerequisites specified at the time of offering. May be repeated two times for credit when content varies, for a maximum 12 units.

STAT 4866 - Undergraduate Seminar

Units: 4

Seminar in probability and/or statistics on topics extending beyond regular courses. Variable content, units, and prerequisites specified at the time of offering. May be repeated two times for credit when content varies, for a maximum 12 units.

STAT 4867 - Undergraduate Seminar

Units: 4

Seminar in probability and/or statistics on topics extending beyond regular courses. Variable content, units, and prerequisites specified at the time of offering. May be repeated two times for credit when content varies, for a maximum 12 units.

STAT 4868 - Undergraduate Seminar

Units: 4

Seminar in probability and/or statistics on topics extending beyond regular courses. Variable content, units, and prerequisites specified at the time of offering. May be repeated two times for credit when content varies, for a maximum 12 units.

STAT 4869 - Undergraduate Seminar

Units: 4

Seminar in probability and/or statistics on topics extending beyond regular courses. Variable content, units, and prerequisites specified at the time of offering. May be repeated two times for credit when content varies, for a maximum 12 units.

STAT 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

STAT 4910 - Advanced Statistical Package Usage

Units: 4

Programming in an advanced statistical software package, producing reformatted data, advanced statistical analysis, and probability modeling. Topics may include graphics, spatial statistics, creating and managing data files, simulations, approximation algorithms. *Prerequisites: STAT 3502, CS 1160.*

STAT 4950 - Advanced Statistical Packages for Data Analysis

Units: 4

Programming and applying computer packages (e.g., SAS, S+). Data preparation and transformation, macros, descriptive statistics. Topics from diagnostics, t-procedures, ANOVA; nonparametrics; cross-tabulation, chi-squared, correlation, regression. Report writing. *Prerequisites: STAT 3502.*

STAT 4960 - R Programing

Units: 4

Data input, data output, data manipulation, use of libraries, data analysis methods, programming interfaces, graphics, functions using R. *Prerequisites: STAT 3502.* Not open to students with credit for STAT 6260.

Statistics: Graduate

STAT 5300 - Quality Engineering

Units: 4

(See ENGR 5300 for course description.)

STAT 5601 - Introductory Statistics and Probability for Science and Engineering

Units: 4

Basic probability rules (independence, Bayes' Theorem), distributions (binomial, Poisson, normal, exponential), reliability. Descriptive, inferential statistics (control charts, estimation, hypothesis testing: one, two samples), correlation, regression. Emphasizes: computer analysis, simulation; science, engineering applications. *Prerequisites: MATH 1305 or departmental approval.* Cross-listed ENGR 5601. Not open to students with credit for STAT 3502/ENGR 3502/MATH 3502.

STAT 6010 - Applied Analysis of Variance

Units: 4

Elementary analysis of variance including multiple comparisons. Factorial analysis of variance, interactions, repeated measures designs, random effects designs. Computer-facilitated analyses. Analysis of real data and written report required. *Prerequisites: STAT 3010, STAT 3031, or STAT 3502.* Not for credit in Statistics M.S. degree.

STAT 6011 - Statistical Modeling for Management and Economics

Units: 4

Concepts in statistics for management and economics. Probability and statistical models. Rare events, waiting time, qualitative and quantitative models. Bayes theorem. Estimation, inference. Linear and nonlinear models. Emphasis on computer estimation of models with statistical analysis of errors and attention to model assumptions. Restricted to post-baccalaureate students. *Co-requisites: MATH 1810.* Not for credit toward M.S. in Mathematics or Statistics.

STAT 6020 - Statistical Methods in Clinical Trials

Units: 4

Experimental designs, statistical analyses, and clinical-scientific-regulatory issues common to clinical trials research. Includes writing analysis plan, conducting statistical analysis meeting constraints of regulatory agencies, reporting results, and data monitoring. *Prerequisites: STAT 3503, STAT 4000, or STAT 6010.* Not for credit in Statistics M.S. degree.

STAT 6059 - Advanced Statistical Methods Using Computing Packages

Units: 4

Using computer packages (e.g., SPSS) and interpreting output applied to social science and education. Data preparation, descriptive statistics, graphs, checks for normality, t-tests, F-tests, ANOVA, cross tabulations, chi-squared tests, and correlation. Report preparation. *Prerequisites: STAT 2010, STAT 3010, STAT 3031, or STAT 3502/MATH 3502; postbaccalaureate/graduate standing.* Not for credit in Statistics graduate program.

STAT 6204 - Probability Theory

Units: 4

Theory of probability. Random variables; joint, marginal, conditional distributions; important distributions (binomial, Poisson, normal, etc.); moments; moment generating functions. Multivariate distributions. Inequalities; limit theorems. Multidimensional transformations; derivation of random variables. *Prerequisites: MATH 2304 or admission to the graduate program.*

STAT 6205 - Statistical Theory

Units: 4

Maximum likelihood and least squares estimation, applications to one-sample, two-sample and regression problems, hypothesis testing, confidence intervals, significance level, bias, precision. *Prerequisites: STAT 6204.*

STAT 6250 - SAS Programming

Units: 4

Professional SAS programming techniques. Data management and processing. Data integrity. Graphical presentation of data. Data reporting techniques. Topics in applied statistics and biostatistics. Introduction to SAS data step, SAS Macros, SAS Reports, SAS SQL, and other relevant programming topics. Report Writing. *Prerequisites: Current enrollment or completion of a graduate level course in statistics.*

STAT 6260 - R Programing

Units: 4

Data input, data output, data manipulation, use of libraries, simulation, data analysis methods, programming interfaces, graphics, functions using R. *Prerequisites: STAT 6304 or consent of instructor.* Dual-listed: STAT 4960.

STAT 6300 - Applied Quality Assurance

Units: 4

(See ENGR 6300 for course description.)

STAT 6304 - Advanced Statistical Inference

Units: 4

Random variables, sampling distributions, conditional probability. Expectation. Estimation, method of moments, maximum likelihood. Confidence intervals. Hypothesis testing. Computer-aided computations and simulations. Topics include: t-tests, correlation, regression, proportions, chi-squared, ANOVA, nonparametrics, bootstrapping. *Prerequisites: MATH 1305 or admission to graduate program.*

STAT 6305 - Analysis of Variance Models

Units: 4

Models for factorial designs: expected mean squares, random effects, nesting, power/sample size, missing data, ANOVA. Model assessment. Computer-aided analysis. Report writing. *Prerequisites: STAT 6304.*

STAT 6310 - Advanced Stochastic Processes and Simulation

Units: 4

Theory of stochastic models. Markov chains: classification, limiting behavior. Continuous-time Markov processes: Poisson, birth-death. Simulations of processes and probability modeling. May include: additional limit theorems, queues, renewal theory, applications. *Prerequisites: STAT 6205.*

STAT 6401 - Advanced Probability I

Units: 4

Advanced treatment of probability theory and its applications. May include: conditioning, generating/characteristic functions, modes of convergence, limit theorems, renewal theory, Markov processes, combinatorial techniques, measure and integration. *Prerequisites: MATH 2304 and (either STAT 3402 or STAT 4401); or admission to graduate program and STAT 6204.* Cross-listed MATH 6401.

STAT 6501 - Mathematical Statistics I

Units: 4

Theory of point and interval estimation and hypothesis testing, from the Neyman-Pearson point of view. May include: decision theory, non-parametric inference, sequential analysis, multivariate analysis, robustness, Bayesian methods, computer intensive methods. *Prerequisites: STAT 6205 or graduate standing in mathematics. Cross-listed MATH 6501, MATH 6502.*

STAT 6502 - Mathematical Statistics II

Units: 4

Theory of point and interval estimation and hypothesis testing, from the Neyman-Pearson point of view. May include: decision theory, non-parametric inference, sequential analysis, multivariate analysis, robustness, Bayesian methods, computer intensive methods. *Prerequisites: STAT 6205 or graduate standing in mathematics. Cross-listed MATH 6501, MATH 6502.*

STAT 6509 - Theory and Application of Regression

Units: 4

Theory of least squares in model fitting. Computational methods in regression, including variable selection, ANOVA and ANCOVA. Model assessment, graphical techniques and assumption checking. Computer-assisted analysis. Report writing. *Prerequisite or Co-requisite: Prerequisite or corequisite: STAT 6305.*

STAT 6510 - Analysis of Variance

Units: 4

The theory and application of the general linear model, the analysis of variance and covariance, application of generalized inverses and decomposition theorems from linear algebra. *Prerequisites: MATH 2101, and either STAT 3503 or STAT 6305. Cross-listed MATH 6510.*

STAT 6511 - Advanced Applied Econometrics

Units: 4

(See ECON 6511 for course description.)

STAT 6515 - Advanced Multivariate Analysis

Units: 4

Advanced, computer-intensive applications of multivariate analysis. Applications of linear algebra. Topics may include ANOVA, canonical correlation, discriminant functions, factor/cluster/spatial analysis. Emphasis on actual data, report writing. *Prerequisites: STAT 6305, and STAT 4950 or STAT 6250, and MATH 2101.*

STAT 6550 - Bayesian Statistics

Units: 4

Bayes Theorem, subjective probability, conjugate priors, non-informative priors, posterior estimation, credible intervals, prediction, sensitivity analysis, comparison to classical procedures, MCMC, Gibbs sampling, hierarchical Bayesian analysis. Use of statistical software. Report writing. *Prerequisites: A graduate level course in Statistics or probability and an upper division course in computational statistics or computer science or consent of instructor. Co-requisites: One of prerequisites allowed as co-requisite.*

STAT 6555 - Statistical Time Series Analysis

Units: 4

Analysis of correlated data in time, trends, seasonal patterns, periodicity, autocorrelation, spectral analysis, filtering, time domain versus spectral domain. Decomposition, autoregression, ARIMA, state-space models, forecasting. Applications to data in economics, engineering, seismology. Use of statistical software. Report writing. *Prerequisites: One course in upper division statistics or probability and statistical computing or consent of instructor.*

STAT 6601 - Advanced Statistical Computing

Units: 4

Implementation of computationally-advanced statistical methods. Topics may include: bootstrap, EM algorithm, Bayesian methods, Markov Chain, Monte Carlo, neural networks, recent methodological advances. *Prerequisites: Senior or graduate standing, previous programming experience and one of: STAT 4950, STAT 6250, or STAT 6260 .*

STAT 6610 - Data Visualization

Units: 4

Methods used in data visualization and interactive exploration of big data. Topics include data merging and exporting, interactive GIS maps, elements of visual perception, effective graphs and charts, and meaningful visual representations of complex statistics and large data sets. Strongly Recommended: Experience with R or STAT 6260. *Prerequisites: STAT 6304 or consent of instructor.*

STAT 6620 - Statistical Learning with R

Units: 4

Introduction to machine learning, including supervised learning such as regression, logistic regression and classification methods. Re-sampling methods such as cross-validation and bootstrap. Unsupervised learning. Applications to data mining, statistical pattern recognition, and data processing. Strongly Recommended: Experience with R. *Prerequisites: STAT 6509, STAT 6260.*

STAT 6651 - Analysis of Categorical Data in Biostatistics

Units: 4

(See BSTA 6651 for course description.)

STAT 6801 - Statistical Consulting

Units: 4

Professional statistical consulting skills. Technical methods such as design of experiments and analysis of complex data. Professional data management and software practices will be covered. Interpersonal consulting skills will be emphasized. Real-life applications will be explored. *Prerequisites: STAT 6250, STAT 6305, STAT 6509 and completion of the University Writing Skills Requirement.*

STAT 6843 - Selected Topics in Biostatistics

Units: 4

(See BSTA 6843-BSTA 6849 for course description.)

STAT 6844 - Selected Topics in Biostatistics

Units: 4

(See BSTA 6843-BSTA 6849 for course description.)

STAT 6845 - Selected Topics in Biostatistics

Units: 4

(See BSTA 6843-BSTA 6849 for course description.)

STAT 6846 - Selected Topics in Biostatistics

Units: 4

(See BSTA 6843-BSTA 6849 for course description.)

STAT 6847 - Selected Topics in Biostatistics

Units: 4

(See BSTA 6843-BSTA 6849 for course description.)

STAT 6848 - Selected Topics in Biostatistics

Units: 4

(See BSTA 6843-BSTA 6849 for course description.)

STAT 6849 - Selected Topics in Biostatistics

Units: 4

(See BSTA 6843-BSTA 6849 for course description.)

STAT 6851 - Selected Topics in Actuarial and Decision Science

Units: 4

Methods in actuarial and decision science extending beyond regular courses. Variable content to be specified at time of offering.

Prerequisites: STAT 3402 or STAT 4401. May be repeated for credit when content varies, for a maximum of 8 units.

STAT 6852 - Selected Topics in Actuarial and Decision Science

Units: 4

Methods in actuarial and decision science extending beyond regular courses. Variable content to be specified at time of offering.

Prerequisites: STAT 3402 or STAT 4401. May be repeated for credit when content varies, for a maximum of 8 units.

STAT 6853 - Selected Topics in Actuarial and Decision Science

Units: 4

Methods in actuarial and decision science extending beyond regular courses. Variable content to be specified at time of offering.

Prerequisites: STAT 3402 or STAT 4401. May be repeated for credit when content varies, for a maximum of 8 units.

STAT 6854 - Selected Topics in Actuarial and Decision Science

Units: 4

Methods in actuarial and decision science extending beyond regular courses. Variable content to be specified at time of offering.

Prerequisites: STAT 3402 or STAT 4401. May be repeated for credit when content varies, for a maximum of 8 units.

STAT 6855 - Selected Topics in Actuarial and Decision Science

Units: 4

Methods in actuarial and decision science extending beyond regular courses. Variable content to be specified at time of offering. *Prerequisites: STAT 3402 or STAT 4401.* May be repeated for credit when content varies, for a maximum of 8 units.

STAT 6856 - Selected Topics in Actuarial and Decision Science

Units: 4

Methods in actuarial and decision science extending beyond regular courses. Variable content to be specified at time of offering. *Prerequisites: STAT 3402 or STAT 4401.* May be repeated for credit when content varies, for a maximum of 8 units.

STAT 6857 - Selected Topics in Actuarial and Decision Science

Units: 4

Methods in actuarial and decision science extending beyond regular courses. Variable content to be specified at time of offering. *Prerequisites: STAT 3402 or STAT 4401.* May be repeated for credit when content varies, for a maximum of 8 units.

STAT 6858 - Selected Topics in Actuarial and Decision Science

Units: 4

Methods in actuarial and decision science extending beyond regular courses. Variable content to be specified at time of offering. *Prerequisites: STAT 3402 or STAT 4401.* May be repeated for credit when content varies, for a maximum of 8 units.

STAT 6859 - Selected Topics in Actuarial and Decision Science

Units: 4

Methods in actuarial and decision science extending beyond regular courses. Variable content to be specified at time of offering. *Prerequisites: STAT 3402 or STAT 4401.* May be repeated for credit when content varies, for a maximum of 8 units.

STAT 6860 - Selected Topics in Graduate Probability and Statistics

Units: 4

Probability and/or Statistics extending beyond regular courses. Variable content to be specified at time of offering. *Prerequisites: Graduate standing and consent of instructor.* May be repeated once for credit with consent of department and when content varies, for a maximum of 8 units.

STAT 6861 - Selected Topics in Graduate Probability and Statistics

Units: 4

Probability and/or Statistics extending beyond regular courses. Variable content to be specified at time of offering. *Prerequisites: Graduate standing and consent of instructor.* May be repeated once for credit with consent of department and when content varies, for a maximum of 8 units.

STAT 6862 - Selected Topics in Graduate Probability and Statistics

Units: 4

Probability and/or Statistics extending beyond regular courses. Variable content to be specified at time of offering. *Prerequisites: Graduate standing and consent of instructor.* May be repeated once for credit with consent of department and when content varies, for a maximum of 8 units.

STAT 6863 - Selected Topics in Graduate Probability and Statistics

Units: 4

Probability and/or Statistics extending beyond regular courses. Variable content to be specified at time of offering. *Prerequisites: Graduate standing and consent of instructor.* May be repeated once for credit with consent of department and when content varies, for a maximum of 8 units.

STAT 6864 - Selected Topics in Graduate Probability and Statistics

Units: 4

Probability and/or Statistics extending beyond regular courses. Variable content to be specified at time of offering. *Prerequisites: Graduate standing and consent of instructor.* May be repeated once for credit with consent of department and when content varies, for a maximum of 8 units.

STAT 6865 - Mathematical Modeling

Units: 4

(See MATH 6865 for course description.)

STAT 6870 - Seminar in Probability and Statistics

Units: 4

An intensive study of a selected topic in probability and/or statistics from current literature emphasizing student participation. *Prerequisites: Graduate standing and consent of instructor.* May be repeated once for credit with consent of department and when content varies, for a maximum of 8 units.

STAT 6871 - Seminar in Probability and Statistics

Units: 4

An intensive study of a selected topic in probability and/or statistics from current literature emphasizing student participation. *Prerequisites: Graduate standing and consent of instructor.* May be repeated once for credit with consent of department and when content varies, for a maximum of 8 units.

STAT 6872 - Seminar in Probability and Statistics

Units: 4

An intensive study of a selected topic in probability and/or statistics from current literature emphasizing student participation. *Prerequisites: Graduate standing and consent of instructor.* May be repeated once for credit with consent of department and when content varies, for a maximum of 8 units.

STAT 6873 - Seminar in Probability and Statistics

Units: 4

An intensive study of a selected topic in probability and/or statistics from current literature emphasizing student participation. *Prerequisites: Graduate standing and consent of instructor.* May be repeated once for credit with consent of department and when content varies, for a maximum of 8 units.

STAT 6874 - Seminar in Probability and Statistics

Units: 4

An intensive study of a selected topic in probability and/or statistics from current literature emphasizing student participation. *Prerequisites: Graduate standing and consent of instructor.* May be repeated once for credit with consent of department and when content varies, for a maximum of 8 units.

STAT 6875 - Seminar in Probability and Statistics

Units: 4

An intensive study of a selected topic in probability and/or statistics from current literature emphasizing student participation. *Prerequisites: Graduate standing and consent of instructor.* May be repeated once for credit with consent of department and when content varies, for a maximum of 8 units.

STAT 6876 - Seminar in Probability and Statistics

Units: 4

An intensive study of a selected topic in probability and/or statistics from current literature emphasizing student participation. *Prerequisites: Graduate standing and consent of instructor.* May be repeated once for credit with consent of department and when content varies, for a maximum of 8 units.

STAT 6877 - Seminar in Probability and Statistics

Units: 4

An intensive study of a selected topic in probability and/or statistics from current literature emphasizing student participation. *Prerequisites: Graduate standing and consent of instructor.* May be repeated once for credit with consent of department and when content varies, for a maximum of 8 units.

STAT 6878 - Seminar in Probability and Statistics

Units: 4

An intensive study of a selected topic in probability and/or statistics from current literature emphasizing student participation. *Prerequisites: Graduate standing and consent of instructor.* May be repeated once for credit with consent of department and when content varies, for a maximum of 8 units.

STAT 6879 - Seminar in Probability and Statistics

Units: 4

An intensive study of a selected topic in probability and/or statistics from current literature emphasizing student participation. *Prerequisites: Graduate standing and consent of instructor.* May be repeated once for credit with consent of department and when content varies, for a maximum of 8 units.

STAT 6895 - Practicum in Statistics

Units: 1-4

Supervised experience tutoring, grading, or consulting through the Statistics Department Consulting Laboratory. Students complete academic assignments integrated with on- or off-campus paid or volunteer activities. *Prerequisites: Advancement to candidacy, approval of the graduate advisor.* May be repeated for credit, for a maximum of 4 units. Five to twenty hrs. act.

STAT 6898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least 3.0 GPA and departmental approval of activity.* May be repeated for credit, for a maximum of 8 units. A maximum of 4 units will be accepted toward the M.S. degree in Statistics.

STAT 6900 - Independent Study

Units: 1-4

STAT 6950 - Graduate Statistics Capstone

Units: 1

Retrospective view of courses required for M.S. degree. Strategies for lifelong learning and contributions to the statistics profession. Preparation for, and completion of, M.S. Comprehensive Examination. *Prerequisites: STAT 6501; Advancement to Candidacy. Co-requisites: STAT 6502.*

STAT 6999 - Issues in Statistics

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in statistics. May be repeated for credit when content varies, for a maximum of 8 units.

Teacher Education

TED 3001 - Exploring Education

Units: 3

Introduction to the field of teaching. Reports and discussions related to directed observations of preschool, elementary and secondary classrooms, and non-school educational settings. Examination of changing issues in education and their implications for future teaching practices and theories.

TED 3005 - Intermediate Field Experience in the Elementary School A

Units: 1

Observation and participation in an elementary school classroom in second quarter of blended Multiple Subject Credential/Liberal Studies Major program. Reports and discussion on issues raised. *Prerequisites: Admission to blended Multiple Subject Credential/Liberal Studies Major Program. CR/NC grading only.*

TED 3006 - Intermediate Field Experience in the Elementary School B

Units: 1

Observation and participation in an elementary school classroom in third quarter of blended Multiple Subject Credential/Liberal Studies Major program. Reports and discussion on issues raised. Focus on classroom management. *Prerequisites: TED 3005. CR/NC grading only.*

TED 3007 - Intermediate Field Experience in the Secondary School A

Units: 1

Observation and participation in a middle or high school classroom. Reports and discussion of issues raised during field experience. *Prerequisites: Admission to Bachelors Plus Single Subject Credential Program. CR/NC grading only.*

TED 3008 - Intermediate Field Experience in the Secondary School B

Units: 1

Observation and participation in a middle or high school classroom. Reports and discussion of issues raised during field experience. *Prerequisites: TED 3007 and admission to Bachelors Plus Single Subject Credential Program. CR/NC grading only.*

TED 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off campus paid or volunteer activities. *Prerequisites: At least 2.75 GPA; departmental approval of activity.* May be repeated for credit, for a maximum of 8 units. No units may be counted toward credential programs. *CR/NC grading only.*

TED 3999 - Issues in Teacher Education

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in teacher education. May be repeated for credit when content varies, for a maximum of 8 units.

TED 4041 - Advanced Tutoring Methods in Reading, Writing and Learning Skills

Units: 4

An introduction to the theories and methods of tutoring reading, writing, and learning skills at the college level. Analysis of receptive and expressive language and learning skills and their application to the content areas. Development of tutor communication skills and diagnostic/prescriptive tutoring methods. *Prerequisites: TED 4040.*

TED 4042 - Advanced Tutoring Methods in Mathematics and Science

Units: 4

An introduction to the theories and methods of tutoring mathematics and science at the college level. Analysis of the critical thinking, learning skills, and problem solving strategies required in math and science. Development of tutor communication skills and diagnostic/prescriptive tutoring methods. *Prerequisites: TED 4040.*

TED 4070 - Early Childhood Education: Language and Literacy Development

Units: 4

Curriculum and instruction for language and literacy development in pre-school programs. Focus on cognition, comprehension, vocabulary, concepts about print, phonemic awareness, needs of English Language Learners, and family literacy. Field Component. *Prerequisites: Junior-year status and concurrent enrollment in the Human Development, Early Childhood Development Option, B.A.; or 12 quarter units of courses in child development; or a Multiple Subject Credential.*

TED 4071 - Early Childhood Education: Integrated Language Arts and Social Studies

Units: 4

Curriculum and instruction for integrated language arts and social studies in pre-school programs. Focus on literature and play, integration of language arts across the curriculum, cultural and linguistic diversity, social skills, and understanding self in relation

to others. Field component. *Prerequisites: Junior-year status and concurrent enrollment in the Human Development, Early Childhood Development Option, B.A.; or 12 quarter units of courses in child development; or a Multiple Subject Credential.*

TED 4072 - Early Childhood Education: Integrated Math and Science

Units: 4

Curriculum and instruction for integrated math and science in pre-school programs. Focus on inquiry based math and science instruction, emergent numeracy, concepts of number and pattern, and science concepts. Field component. *Prerequisites: Junior-year status and concurrent enrollment in the Human Development, Early Childhood Development Option, B.A.; or 12 quarter units of courses in child development; or a Multiple Subject Credential.*

TED 4073 - Early Childhood Education: Integrated Arts

Units: 2

Curriculum and instruction for integrated arts education in pre-school programs. Focus on the integration of the visual and performing arts across the curriculum. Field component. *Prerequisites: Junior-year status and concurrent enrollment in the Human Development, Early Childhood Development Option, B.A.; or 12 quarter units of courses in child development; or a Multiple Subject Credential.*

TED 4074 - Early Childhood Education: Inclusive Practices

Units: 4

Developmentally appropriate practice for young children with disabilities, developmental delays, and those "at-risk". Early intervention, preschool programs, and other service delivery approaches examined from a culturally sensitive, family-focused perspective. Field component. *Prerequisites: Junior-year status and concurrent enrollment in the Human Development, Early Childhood Development Option, B.A.; or 12 quarter units of courses in child development; or a Multiple Subject Credential.*

TED 4075 - Early Childhood Education: Professional Seminar and Practicum

Units: 6

Culminating course in Early Childhood Education Minor. Focus on pre-school models, standards-based instruction, positive classroom environments, characteristics of effective programs, working with colleagues and families. Supervised field practicum. *Prerequisites: Completion of all of the following courses: TED 4070, TED 4071, TED 4072, TED 4073, and TED 4074 or permission of instructor.*

TED 4320 - Art Skills for Teachers

Units: 4

Designed specifically for teachers with little or no art experience. Work in drawing, printmaking, weaving, papier maché, puppets, masks, batik, tie dyeing, lettering. Suggestions for translating teacher skills into activities for children. May be repeated once for credit, for a maximum of 8 units.

TED 4325 - Arts Integration for Teachers

Units: 4

Designed specifically for teachers with little or no experience in the visual and performing arts. Work in integrating standards based theater, music, dance, and visual arts into elementary math, science and language arts content. May be repeated once, for a maximum of 8 units.

TED 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor for a maximum of 12 units.

Teacher Education: Graduate

TED 6010 - Seminar in Teaching and Learning Mathematics

Units: 4

Research and analysis of selected topics pertinent to Mathematics in elementary school. Reports on current research, contemporary and experimental programs, and new materials. *Prerequisites:* Consent of instructor. May be repeated for credit.

TED 6015 - Using Research to Improve Learning

Units: 4

Analysis of research findings which focus on issues, problems and interests, related to learning. Development of recommendations for improved learning in specified classes, schools, and/or districts.

TED 6020 - Research in Education

Units: 4

Basic methods of educational research. Components of a research proposal. *Prerequisites:* Consent of Instructor. For candidates pursuing the M.S. in Education, Option in Reading Instruction, TED 6250 must be taken before TED 6020.

TED 6021 - Seminar in Diagnosis and Treatment of Learning Difficulties in Mathematics

Units: 4

Causes and effects of mathematics learning disabilities. Methods and instruments useful in diagnosis and treatment. Evaluation of materials for the correction of mathematical learning problems. *Prerequisites:* Consent of instructor.

TED 6040 - Advanced Curriculum and Instruction in Mathematics

Units: 4

Historical and philosophical study of curriculum trends, modern curricular developments including use of newer instructional media, individualization of instruction, school computer usage, and evaluation techniques.

TED 6050 - Seminar in Science and Health Education Research

Units: 4

Review of recent research concerning science and health education in grades K-14. Thinking of leading science and health educators regarding purposes and programs needed in the near future. Planning for change processes in schools. *Prerequisites:* Consent of instructor.

TED 6070 - Graduate Studies in Early Childhood Education: Language and Literacy Development

Units: 4

Curriculum and instruction for language and literacy development in pre-school programs. Focus on cognition, comprehension, vocabulary, concepts about print, phonemic awareness, needs of English Language Learners, and family literacy. Required professional project that integrates the professional literature and defines a leadership role, will be designed, implemented, and

analyzed by the student. Field component. *Prerequisites: Graduate Standing; 12 units in Early Childhood Education/EC Development or Multiple Subject Teaching Credential; or permission of instructor.*

TED 6071 - Graduate Studies in Early Childhood Education: Integrated Language Arts and Social Studies

Units: 4

Curriculum and instruction for integrated language arts and social studies in pre-school programs. Focus on literature and play, integration of language arts across the curriculum, cultural and linguistic diversity, social skills, and understanding self in relation to others. Required professional project that integrates the professional literature and defines a leadership role, will be designed, implemented, and analyzed by the student. Field component. *Prerequisites: Graduate Standing; 12 units in Early Childhood Education/EC Development or Multiple Subject Teaching Credential; or permission of instructor.*

TED 6072 - Graduate Studies in Early Childhood Education: Integrated Mathematics and Science

Units: 4

Curriculum and instruction for integrated math and science in pre-school programs. Focus on inquiry based math and science instruction, emergent numeracy, concepts of number and pattern, and science concepts. Required professional project that integrates the professional literature and defines a leadership role, will be designed, implemented, and analyzed by student. Field component. *Prerequisites: Graduate Standing; 12 units in Early Childhood Education/EC Development or Multiple Subject Teaching Credential; or permission of instructor.*

TED 6073 - Graduate Studies in Early Childhood Education: Integrated Arts

Units: 2

Curriculum and instruction for integrated arts education in pre-school programs. Focus on the integration of the visual and performing arts across the curriculum. Required professional project that integrates the professional literature and defines a leadership role, will be designed, implemented, and analyzed by student. Field component. *Prerequisites: Graduate Standing; 12 units in Early Childhood Education/EC Development or Multiple Subject Teaching Credential; or permission of instructor.*

TED 6074 - Graduate Studies in Early Childhood Education: Integrated Arts

Units: 4

Developmentally appropriate practice for young children with disabilities, developmental delays, and those "at-risk". Early intervention, preschool programs, and other service delivery approaches examined from a culturally sensitive, family-focused perspective. Required professional project that integrates the professional literature and defines a leadership role, will be designed, implemented, and analyzed by student. Field component. *Prerequisites: Graduate Standing; TED 6070, TED 6071, TED 6072, TED 6073; or permission of instructor.*

TED 6075 - Early Childhood Education: Professional Leadership Seminar

Units: 4

Culminating course in ECE. Focus on effective models delivering professional development, advocacy and working with families. *Prerequisites: TED 4070, TED 4071, TED 4072, TED 4073, TED 4074 and/or permission of instructor. Must take concurrently with TED 6076.*

TED 6076 - Early Childhood Education: Professional Practicum

Units: 4

Supervised field practicum. Includes clinical supervision model, mentoring and reflective practice. *Prerequisites: TED 4070, TED 4071, TED 4072, TED 4073, TED 4074, or permission of instructor. Co-requisites: Must take concurrently with TED 6075.*

TED 6124 - Advanced Study in Multicultural Education

Units: 4

Analysis of research on educational policies and practices regarding the development of ethnic identity; compensatory and cross-cultural education. Application to implementation of school programs. *Prerequisites: TED 5038 or consent of instructor.*

TED 6220 - Focus on Diversity

Units: 4

Review research; develop a culture of literacy capitalizing on students' diverse knowledge and skills; support second language development; plan, implement and assess instruction to students for diverse ethnic, cultural and socioeconomic groups.

TED 6230 - Reading/Language Arts: Literacy Research and Methods I

Units: 4

Review research; learn normal progression of literacy development relative to grade level standards; plan, implement and assess research based literacy instruction including phonemic awareness, phonics, fluency and writing for pre-K and up. *A-F grading only.*

TED 6231 - Reading/Language Arts: Literacy Assessment and Intervention I

Units: 4

Review research; introduction to principles of formal and informal literacy-based assessments; learn to select, administer and evaluate assessment data for different audiences and purposes.

TED 6232 - Reading/Language Arts: Literacy Assessment and Intervention II

Units: 4

Review research; learn to assess, instruct and provide intervention for each component of research based literacy instruction; modify the curriculum to address specific needs of students; interpret and use assessment data to inform placement and intervention decisions. *Prerequisites: TED 6231*

TED 6246 - Critical Analysis of Children's Literature

Units: 3

Critical analysis of literature intended for children. Study of various literary forms. Extensive readings on children's literature. *Prerequisites: 14 Units in children's literature. May be repeated once for credit, for a maximum of 6 units.*

TED 6250 - Reading Research and Evaluation

Units: 4

Introduction to research and evaluation of literacy development. *Prerequisites: For candidates pursuing the MS in Education, Option in Reading Instruction, TED 6250 must be taken before TED 6020.*

TED 6251 - Reading/Language Arts: Field Experience

Units: 3

Observation and evaluation of an exemplary school's reading and language arts program. Observation and collaboration with a certified practicing reading specialist. *Prerequisites: TED 6232 or permission of instructor.*

TED 6253 - Reading/Language Arts: Literacy Research and Methods II

Units: 4

Review research; plan, implement and assess research based literacy instruction including oral language, vocabulary and reading comprehension for pre-K and up; facilitate use of print media and digital resources.

TED 6300 - Foundations of Curriculum Development

Units: 4

Determinants of curricula in elementary and secondary schools. Effects of national goals, state legislation, and community forces on curriculum development. Theories and patterns of curriculum organization.

TED 6416 - Development of Environmental Education

Units: 4

History, needs, conceptual framework, trends and types of programs in the United States and the world. Review of literature and dissertations and masters' theses. *Prerequisites: Consent of instructor.*

TED 6440 - Curriculum in Science and Health Education

Units: 4

Analysis of various curricular programs and materials for the teaching of science and/or health in grades K-12.

TED 6700 - Advanced Educational Psychology

Units: 4

Theories and research that comprise the knowledge base for the field of educational psychology.

TED 6898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least 3.0 GPA; departmental approval of activity.* May be repeated for credit, for a maximum of 8 units. No units may be counted toward credential programs. *CR/NC grading only.*

TED 6899 - Project

Units: 2-5

Development of an original product which is summarized in a written abstract. Both the project and the abstract are submitted to the department which specifies their formats. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense may be required. *Prerequisites: Graduate standing.* May be repeated for credit, for a maximum of 5 units.

TED 6900 - Independent Study

Units: 1-4

TED 6901 - Graduate Synthesis

Units: 4

Alternative to thesis/project. Implementation of action research. Creation of professional development plan and reflection on graduate program. Includes comprehensive examination. *Prerequisites:* Consent of instructor.

TED 6902 - Action Research and Writing: APA Style, Human Subjects, Campus Resources

Units: 2

Process for successfully completing action (classroom-based) research and writing. Emphasis on American Psychological Association (APA) style and process for gaining campus Human Subjects approval. Campus resources to support research and writing. *Co-requisites:* Concurrent enrollment in TED 6300. A-F grading only.

TED 6903 - Action Research and Writing: Research Synthesis and Topic Definition

Units: 2

Process for successfully completing action (classroom-based) research and writing. Emphasis on synthesizing published research on a specific topic and defining a topic for action research. *Co-requisites:* Concurrent enrollment in TED 6700. A-F grading only.

TED 6904 - Action Research and Writing: Project Design

Units: 2

Process for successfully completing action (classroom-based) research and writing. Emphasis on the components of a feasible action research project. *Co-requisites:* Concurrent enrollment in TED 6020. A-F grading only.

TED 6905 - Action Research and Writing: Reflection and Professional Development

Units: 2

Process for successfully completing action (classroom-based) research and writing. Reflection on the experience of completing an action research project. Definition of future professional development agenda. *Co-requisites:* Concurrent enrollment in TED 6901. A-F grading only.

TED 6909 - Departmental Thesis

Units: 2-5

Development and writing of a research paper for submission to the department which specifies its format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. *Prerequisites:* Graduate standing. May be repeated for credit, for a maximum of 5 units.

TED 6910 - University Thesis

Units: 1-6

Development and writing of a formal research paper for submission to the university in the specified bound format. Supervision by a departmental committee, at least one of whom must be a Cal State East Bay faculty member. Oral defense normally required. (See also, "University Thesis Writing Guide," www.csueastbay.edu/thesiswritingguide.) *Prerequisites:* Graduate standing. May be repeated for credit, for a maximum of 6 units.

TED 6999 - Issues in Teacher Education

Units: 1-4

Readings, discussion, and research on contemporary and/or significant issues in teacher education. May be repeated for credit when content varies, for a maximum of 8 units.

Teacher Education: Post-Baccalaureate

TED 5061 - TPA Subject-Specific Pedagogy Task I Tutorial

Units: 2

Tutorial and assessment of re-submitted Teaching Performance Assessment (TPA) Subject-Specific Pedagogy Task I.

Prerequisites: Admission to the Multiple Subject Credential or Single Subject Credential Program.

TED 5062 - TPA Designing Instruction Task II Tutorial

Units: 2

Tutorial and assessment of re-submitted Teaching Performance Assessment (TPA) Designing Instruction Task II. *Prerequisites:*

Admission to the Multiple Subject Credential or Single Subject Credential Program.

TED 5063 - TPA Culminating Teaching Experience Task III Tutorial

Units: 2

Tutorial and assessment of re-submitted Teaching Performance Assessment (TPA) Assessing Learning Task III. *Prerequisites:*

Admission to the Multiple Subject Credential or Single Subject Credential Program.

TED 5064 - TPA Culminating Teaching Experience Task IV Tutorial

Units: 2

Tutorial and assessment of re-submitted Teaching Performance Assessment (TPA) Culminating Experience Task IV.

Prerequisites: Admission to the Multiple Subject Credential or Single Subject Credential Program.

TED 5110 - Computer-Based Technology in the Classroom I

Units: 3

General and specific knowledge and skills appropriate for beginning teachers. Hardware and software terminology, operation, troubleshooting, record management, e-mail, collaborative tools, copyright, privacy, security and safety issues. Relevance for K-12 student learning. *Prerequisites: Junior standing.*

TED 5211 - TPA Subject-Specific Pedagogy Task I Assessment

Units: 1

Assessment of the Teaching Performance Assessment (TPA) Subject-Specific Pedagogy Task I. Course taught online.

Prerequisites: Admission to the Multiple Subject Credential or Single Subject Credential Program.

TED 5212 - TPA Designing Instruction Task II Assessment

Units: 1

Assessment of the Teaching Performance Assessment (TPA) Designing Instruction Task II. Course taught online. *Prerequisites: Admission to the Multiple Subject Credential or Single Subject Credential Program.*

TED 5213 - TPA Assessing Learning Task III Assessment

Units: 1

Assessment of the Teaching Performance Assessment (TPA) Assessing Learning Task III. Course taught online. *Prerequisites: Admission to the Multiple Subject Credential or Single Subject Credential Program.*

TED 5214 - TPA Culminating Teaching Experience Task IV Assessment

Units: 1

Assessment of the Teaching Performance Assessment (TPA) Culminating Teaching Experience Task IV. Course taught online. *Prerequisites: Admission to the Multiple Subject Credential or Single Subject Credential Program.*

TED 5242 - Teaching Multicultural Literature to Children

Units: 4

Analysis and selection of books focuses on multicultural populations that present accurate and positive depictions. Emphasis on the integration and use of these books in the classroom.

TED 5301 - Psychological Foundations in Middle and Secondary School Education

Units: 4

Analysis of teaching and learning using psychological theory and research. Emphasis on social and cognitive development, learning processes, motivation, evaluation, applications to students with varying cultural and linguistic backgrounds, ages, and motivation levels. Introduction to the Teaching Performance Assessment (TPA). *Prerequisites: Admission to the Single Subject Credential Program.*

TED 5305 - Social/Cultural Context of Education

Units: 3

A study of the philosophy, history, and sociology of American education with emphasis on the issues of ethnicity and gender and the skills necessary to incorporate diversity into curriculum and instruction to make equitable secondary school classrooms. *Prerequisites: Admission to the Single Subject Credential Program.*

TED 5306 - Teaching and Learning in the Single Subject Classroom II

Units: 7

Introduction to theory and practice for teaching in single subject classrooms. Focus on environment, development, assessment, professionalism, diversity, technology, and literacy. Application in beginning weeks of a teaching assignment. *Prerequisites: TED 5306.*

TED 5308 - Teaching and Learning in the Single Subject Classroom III

Units: 7

Theory and practice for teaching in single subject classrooms. Focus on environment, development, assessment, professionalism, diversity, technology, and literacy. Emphasis on individual differences among students. *Prerequisites: TED 5306, TED 5307.*

TED 5309 - Teaching and Learning in the Single Subject Classroom IV

Units: 7

Synthesis of theory and practice for teaching in single subject classrooms. Focus on environment, development, assessment, professionalism, diversity, technology, and literacy. Emphasis on individual differences among students. *Prerequisites: TED 5306, TED 5307, TED 5308.*

TED 5311 - Classroom Environment

Units: 2

Strategies for a productive classroom learning environment. Models of classroom management, crisis prevention, and conflict resolution. Introduction to school law. Focus on either elementary or secondary classrooms. *Prerequisites: Admission to Multiple Subject Credential or Single Subject Credential Program.*

TED 5314 - Teaching Special Populations in Regular Classrooms

Units: 3

Development of effective patterns, strategies, materials to assist pre-service teachers to work with the broad range of "identified," "gifted," and "at-risk" students in the regular classroom. Overview of basic concepts, issues and effective practices.

TED 5318 - Professional Responsibilities

Units: 3

Professional issues, rights and responsibilities of teachers and students. Self-assessment and self-direction for continuing professional growth. *Prerequisites: Admission to the Single Subject Credential Program.*

TED 5320 - Content Literacy

Units: 3

Theory, research, and instructional methodology to teach content-based reading and writing skills to a full range of secondary-school students, including struggling readers, students with special needs, English learners and speakers of non-standard English, and advanced learners. *Prerequisites: Admission to the Single Subject Credential Program.*

TED 5326 - Preparation to Teach English Learners in the Single Subject Classroom

Units: 3

Principles, policies, and practices that address the English language and subject matter learning needs of English learners. *Prerequisites: Admission to the Single Subject Credential Program.*

TED 5333 - Teaching Performance Assessment for Early Completion

Units: 4

Preparation assistance, administration and scoring of Teaching Performance Assessment for Multiple Subject Credential and Single Subject Credential intern-candidates under SB-57 Early Completion. *Prerequisites: Must have passed Teaching Foundations exam and be classified as intern-candidate for Early Completion under SB-57.* May be repeated two times for credit, for a maximum of 12 units.

TED 5347 - Student Teaching A in Blended Program

Units: 4

First quarter of a supervised student teaching in an elementary school classroom for four mornings and one afternoon a week. *Prerequisites: Admission to blended Multiple Subject Credential/Liberal Studies program, senior standing.*

TED 5348 - Student Teaching B in Blended Program

Units: 6

Second quarter of supervised student teaching in an elementary school classroom for four mornings and three afternoons a week. Minimum of one week solo teaching. *Prerequisites: TED 5347.*

TED 5349 - Student Teaching C in Blended Program

Units: 9

Third quarter of supervised student teaching in an elementary school classroom for five mornings and two afternoons a week. Minimum of two-weeks of all-day, solo teaching. *Prerequisites: TED 5348.*

TED 5350 - Curriculum and Instruction: Mathematics in the Elementary School

Units: 3

Theory, content and methods of teaching mathematics in the elementary classroom. Emphasis on number systems, operations, problem solving, assessment, computer assisted instruction, resource materials, and sheltered instruction for English Learners. *Prerequisites: Admission to the Multiple Subject Credential Program.*

TED 5351 - Psychological Foundations of Education and Planning for Instruction

Units: 4

Research-based theories and principles of human learning and development and their application to elementary school classroom settings. Data-gathering techniques on students' physical, social, and emotional development. Basic principles of instructional planning in a standards-based curriculum. Introduction to the Teaching Performance Assessment (TPA). *Prerequisites: Admission to the Multiple Subject Credential Program.*

TED 5352 - Curriculum and Instruction: Reading/Language Arts in the Elementary School-A

Units: 3

Development of a balanced, comprehensive program in reading, writing, and related language instruction in K-8 classrooms. Focus on meeting the needs of the full range of learners, planning instruction based on the 2007 Reading/Language Arts Framework, phonological and phonemic awareness, concepts about print, phonics and sight words, spelling instruction and fluency. *Prerequisites: Admission to the Multiple Subject Credential Program.*

TED 5354 - Student Teaching I

Units: 5

Required field experience for Multiple Subject Credential candidates. *Prerequisites: Approval by department.*

TED 5355 - Equity and Diversity/Teaching English Learners A

Units: 4

Principles of equity and diversity and their implementation in curriculum content and school practices in elementary school

classrooms. Knowledge, skills, and abilities to deliver comprehensive instruction to English Learners. *Prerequisites: Admission to the Multiple Subject Credential Program.*

TED 5356 - Curriculum and Instruction: Reading/Language Arts in the Elementary School-B

Units: 3

Development of a balanced, comprehensive program in reading, writing, and related language instruction in K-8 classrooms. Focus on meeting the needs of the full range of learners, planning instruction based on the 2007 Reading/Language Arts Framework, assessment, syllabic and structural analysis, vocabulary, factors affecting reading comprehension, how to facilitate reading comprehension. *Prerequisites: Admission to the Multiple Subject Credential Program.*

TED 5357 - Curriculum and Instruction: Teaching Science, Health and Safety in the Elementary School

Units: 3

Models, methods, and materials for teaching science, health and safety in elementary schools. *Prerequisites: Admission to the Multiple Subject Credential Program.*

TED 5359 - Student Teaching II

Units: 6

Required field experience for Multiple Subject Credential candidates. *Prerequisites: Approval by department.*

TED 5360 - Curriculum and Instruction: Reading/Language Arts and Social Studies in the Elementary School

Units: 4

Curriculum and instruction to teach reading/language arts and social studies in K-8 classrooms. Focus on meeting the needs of the full range of learners, writing and oral language development, literary response and analysis, English language conventions, student independent reading, comprehension of expository/informational texts, study and research skills, methodology for teaching social studies, integrated instruction. *Prerequisites: Admission to the Multiple Subject Credential Program.*

TED 5361 - Student Teaching III

Units: 6

Required field experience for Multiple Subject Credential candidates. *Prerequisites: Approval by department.*

TED 5366 - Equity and Diversity/Teaching English Learners B

Units: 3

Review and synthesis of (1) Principles of equity and diversity and their implementation in curriculum content and school practices in elementary school classrooms; and (2) Knowledge, skills, and abilities to deliver comprehensive instruction to English Learners. *Prerequisites: Admission to the Multiple Subject Credential Program.*

TED 5367 - Bilingual Methods

Units: 3

Theory, content, materials of dual-language acquisition and development. Strategies for primary language instruction in various areas to provide equal access to the core curriculum.

TED 5371 - Classroom Implications of the Culture of the Latino Child

Units: 3

Focus on major historical experiences of various Latino groups in the United States (pre-Columbian period, the Conquest, colonial period, years of independence, contemporary U.S. life) and their implications for the classroom teacher. Emphasis on cultural commonalities, demographics, immigration, educational patterns, and general relationships among Latinos and the majority culture which influence teaching and learning. Taught in Spanish. *Prerequisites: Permission of department.*

TED 5372 - Team Seminar I: Orientation to TPA Subject-Specific Pedagogy Task I and Reflection on Field Practice

Units: 1

Orientation to the Teaching Performance Assessment (TPA) Subject-Specific Pedagogy Task I. Guided reflection on assigned field experience. *Prerequisites: Admission to the Multiple Subject Credential or Single Subject Credential Program.*

TED 5373 - Team Seminar II: Orientation to TPA Designing Instruction Task II and Reflection on Field Practice

Units: 1

Orientation to the Teaching Performance Assessment (TPA) Task Designing Instruction Task II. Guided reflection on assigned field experience. *Prerequisites: Admission to the Multiple Subject Credential or Single Subject Credential Program.*

TED 5374 - Team Seminar III: Orientation to TPA Assessing Learning Task III and Reflection on Field Practice

Units: 1

Orientation to the Teaching Performance Assessment (TPA) Assessing Learning Task III. Guided reflection on assigned field experience. *Prerequisites: Admission to the Multiple Subject Credential or Single Subject Credential Program.*

TED 5375 - Team Seminar IV: Orientation to TPA Culminating Teaching Experience Task IV and Reflection on Field Practice

Units: 1

Orientation to the Teaching Performance Assessment (TPA) Culminating Teaching Experience Task IV. Guided reflection on assigned field experience. *Prerequisites: Admission to the Multiple Subject Credential or Single Subject Credential Program.*

TED 5376 - Curriculum and Instruction: Physical Education Methods

Units: 1

Strategies for teaching physical education and recreational activities as well as components of a healthy lifestyle. *Prerequisites: Admission to the Multiple Subject Credential Program.*

TED 5377 - Curriculum and Instruction: Visual and Performing Arts Methods

Units: 2

Specific teaching strategies that are effective in achieving the goals of artistic perception; creative expression; understanding the cultural and historical origins of the arts; pursuing meaning in the arts; and making informed judgments about the arts.

Prerequisites: Admission to the Multiple Subject Credential Program.

TED 5378 - Teaching Special Populations in General Education Settings

Units: 4

Development of effective patterns, strategies, materials to assist prospective teachers to work with the broad range of "identified," "gifted" and "at-risk" students attending schools in grades K-12. Overview of appropriate differentiated, individualized and classroom instructional strategies for general education settings. *Prerequisites: Admission to the Multiple Subject*

Credential Program.

TED 5380 - Health and Safety in the Secondary School

Units: 2

Identification of major laws, concepts, and principles related to student health and safety; site, district, and community resources.

TED 5381 - Field Experience in the Single Subject Classroom A

Units: 7

First supervised placement as an intern or student teacher in a single subject classroom. *Prerequisites: Permission of department.*

TED 5382 - Field Experience in the Single Subject Classroom B

Units: 7

Second supervised placement as an intern or student teacher in a single subject classroom. *Prerequisites: Permission of department.*

TED 5383 - Field Experience in the Single Subject Classroom C

Units: 7

Third supervised placement as an intern or student teacher in a single subject classroom. *Prerequisites: Permission of department.*

TED 5390 - Instructional Methods for the Single Subject Classroom I

Units: 3

Introduction to theory and practice of instructional methodology in a single subject classroom. Separate sections for art, English, foreign languages, mathematics, music, physical education, science, and social studies. *Prerequisites: Admission to Single Subject Credential Program.*

TED 5391 - Instructional Methods for the Single Subject Classroom II: Focus on Differentiated Instruction

Units: 2

Theory and practice of instructional methodology in a single subject classroom. Application in the beginning weeks of a teaching assignment. Separate sections for art, English, foreign languages, mathematics, music, physical education, science, and social studies. *Prerequisites: TED 5390.*

TED 5392 - Instructional Methods for the Single Subject Classroom III: Focus on Literacy

Units: 2

Theory and practice of instructional methodology in a single subject classroom. Emphasis on individual differences among students. Separate sections for art, English, foreign languages, mathematics, music, physical education, science, and social studies. *Prerequisites: TED 5390, TED 5391.*

TED 5393 - Instructional Methods for the Single Subject Classroom IV: Focus on Equity

Units: 2

Synthesis of theory and practice of instructional methodology in a single subject classroom. Separate sections for art, English, foreign languages, mathematics, music, physical education, science, and social studies. *Prerequisites: TED 5390, TED 5391, TED 5392.*

TED 5443 - Student Teaching A in Bachelors Plus Program

Units: 4

First quarter of supervised student teaching in a secondary school classroom for two hours, five days a week. Minimum of one week of solo teaching. *Prerequisites: Senior standing in the Bachelors Plus Single Subject Credential Program.*

TED 5444 - Student Teaching B in Bachelors Plus Program

Units: 4

Second quarter of supervised student teaching in a secondary school classroom for five mornings a week. *Prerequisites: TED 5443.*

TED 5445 - Student Teaching C in Bachelors Plus Program

Units: 9

Third quarter of supervised student teaching in a secondary school classroom for five mornings a week. Minimum of two weeks of solo teaching. *Prerequisites: TED 5444.*

TED 5512 - Reading/Language Arts for the Multiple Subject Teacher

Units: 4

Examines current research and practice for literacy development for students in grades K-8. Includes, but is not limited to acquisition of literacy, phonemic awareness, word attack strategies, fluency, spelling, writing, comprehension, content area reading, assessment, English Language Learners, managing and organizing for instruction. Satisfies out-of-state Reading class requirement. *Prerequisites: Out-of-state basic multiple subject teaching credential or approval of instructor.*

TED 5549 - Foundations of Teaching: Principles and Practices in Early Childhood Education

Units: 6

Exploration of pre-kindergarten schools, including principles of developmentally appropriate curricula, organization and structure, roles of parents, federal, state, and local policy, and characteristics of the pre-kindergarten child. *Prerequisites: Admission to the Multiple Subject Credential , TK3 Pathway.*

TED 5550 - Psychological Foundations of Education and Classroom Environments

Units: 4

Theories and principles of human learning and their application to elementary school settings. Strategies for a productive classroom environment. Special emphasis on TK-3 children and classrooms. *Prerequisites: Admission to the Multiple Subject Credential Program, TK3 Pathway.*

TED 5551 - Curriculum and Instruction: Mathematics and Technology in the Elementary School

Units: 4

Theory, content, and methods of teaching mathematics in the elementary classroom. Use of computer-based technology. Special emphasis on TK-3 children and classrooms. *Prerequisites: Admission to the Multiple Subject Credential Program, TK3 Pathway.*

TED 5552 - Curriculum and Instruction: Reading/Language Arts in the Elementary School - A

Units: 4

Theory, content, and methods of teaching reading/language arts in an elementary classroom. Focus on meeting the needs of all learners, instructional planning, phonological and phonemic awareness, concepts about print, phonics and sight words, spelling instruction, and fluency. Special emphasis on TK-3 children and classrooms. *Prerequisites: Admission to the Multiple Subject Credential Program, TK3 Pathway.*

TED 5553 - Curriculum and Instruction: Reading/Language Arts in the Elementary School - B

Units: 4

Theory, content, and methods of teaching reading/language arts in an elementary classroom. Focus on meeting the needs of all learners, assessment, syllabic and structural analysis, vocabulary, and comprehension. Special emphasis on TK-3 children and classrooms. *Prerequisites: Admission to the Multiple Subject Credential Program, TK3 Pathway.*

TED 5554 - Curriculum and Instruction: Teaching English Learners in the Elementary School

Units: 4

Theory, content, and methods of teaching English Learners in an elementary classroom. Special emphasis on TK-3 children and classrooms. *Prerequisites: Admission to the Multiple Subject Credential Program, TK3 Pathway.*

TED 5555 - Curriculum and Instruction: Science, Health, Safety, and Technology in the Elementary School

Units: 4

Theory, content, and methods of teaching science, health, safety, in an elementary classroom. Use of computer-based technology. Special emphasis on TK-3 children and classrooms. *Prerequisites: Admission to the Multiple Subject Credential Program, TK3 Pathway.*

TED 5556 - Curriculum and Instruction: Equity, Diversity and Social Studies in the Elementary School

Units: 4

Principles of equity and diversity and their implementation in an elementary classroom. Theory, content, and methods of teaching

social studies in an elementary classroom. Special emphasis on TK-3 children and classrooms. *Prerequisites: Admission to the Multiple Subject Credential Program, TK3 Pathway.*

TED 5557 - Curriculum and Instruction: Visual & Performing Arts and Physical Education Methods in the Elementary School

Units: 3

Theory, content, and methods of teaching the visual arts, performing arts, and physical education in an elementary classroom. Special emphasis on TK-3 children and classrooms. *Prerequisites: Admission to the Multiple Subject Credential Program, TK3 Pathway.*

TED 5560 - Multiple Subject Transitional Kindergarten to Grade 3 Student Teaching Seminar I

Units: 1

Reflection and discussion of the first student teaching experience in the TK3 Pathway. *Prerequisites: Admission to the Multiple Subject Credential Program, TK3 Pathway.*

TED 5561 - Multiple Subject Transitional Kindergarten to Grade 3 Student Teaching Seminar II

Units: 1

Reflection and discussion of the second student teaching experience in the TK3 Pathway. *Prerequisites: Admission to the Multiple Subject Credential Program, TK3 Pathway.*

TED 5562 - Multiple Subject Transitional Kindergarten to Grade 3 Student Teaching Seminar III

Units: 1

Reflection and discussion of the third student teaching experience in the TK3 Pathway. *Prerequisites: Admission to the Multiple Subject Credential Program, TK3 Pathway.*

TED 5563 - Multiple Subject Transitional Kindergarten to Grade 3 Student Teaching Seminar IV

Units: 1

Reflection and discussion of the fourth student teaching experience in the TK3 Pathway. *Prerequisites: Admission to the Multiple Subject Credential Program, TK3 Pathway.*

TED 5564 - Multiple Subject Transitional Kindergarten to Grade 3 PACT Seminar I

Units: 1

Orientation to successful completion of the Performance Assessment of California Teachers (PACT). *Prerequisites: Admission to the Multiple Subject Credential Program.*

TED 5565 - Multiple Subject Transitional Kindergarten to Grade 3 PACT Seminar II

Units: 1

Further exploration of the Performance Assessment of California Teachers (PACT). *Prerequisites: Admission to the Multiple Subject Credential Program.*

TED 5566 - Multiple Subject Transitional Kindergarten to Grade 3 Student Teaching I

Units: 2

First quarter of student teaching in the TK3 Pathway. *Prerequisites: Admission to the Multiple Subject Credential Program, TK3 Pathway.*

TED 5567 - Multiple Subject Transitional Kindergarten to Grade 3 Student Teaching II

Units: 4

Second quarter of student teaching in the TK3 Pathway. *Prerequisites: Admission to the Multiple Subject Credential Program, TK3 Pathway.*

TED 5568 - Multiple Subject Transitional Kindergarten to Grade 3 Student Teaching III

Units: 5

Third quarter of student teaching in the TK3 Pathway. *Prerequisites: Admission to the Multiple Subject Credential Program, TK3 Pathway.*

TED 5569 - Multiple Subject Transitional Kindergarten to Grade 3 Student Teaching IV

Units: 6

Fourth quarter of student teaching in the TK3 Pathway. *Prerequisites: Admission to the Multiple Subject Credential Program, TK3 Pathway.*

TED 5700 - Reflections on Professional Practice: a Supportive Environment for Student Learning

Units: 2

Theory, research, and best practice on establishing a productive environment in a K-12 classroom. Focus on creating an equitable classroom for all students. *Prerequisites: Preliminary or Level I Teaching Credential; admission to the Multiple Subject Credential program.*

TED 5702 - Reflections on Professional Practice: Assessing Instructional Experiences

Units: 2

Theory, research, and best practice on assessing the instructional experiences in a K-12 classroom. Focus on options for gathering, analyzing and sharing data. *Prerequisites: Preliminary or Level I Teaching Credential; admission to the Multiple Subject Credential program.*

TED 5703 - Reflections on Professional Practice: Instructional Planning, The Lesson

Units: 2

Theory, research, and best practice on instructional planning in a K-12 classroom. Focus on elements of effective lessons. *Prerequisites: Preliminary or Level I Teaching Credential; admission to the Multiple Subject Credential program.*

TED 5704 - Reflections on Professional Practice: Standards-Based Instruction

Units: 2

Theory, research, and best practice for instruction in a standards-based system. Focus on instructional implications of California's K-12 content standards. *Prerequisites: Preliminary or Level I Teaching Credential; admission to the Multiple Subject Credential program.*

TED 5705 - Reflections on Professional Practice: Instructional Planning

Units: 2

Theory, research, and best practices on instructional planning in a K-12 classroom. Focus on units of study. *Prerequisites: Preliminary or Level I Teaching Credential; admission to the Multiple Subject Credential program.*

TED 5706 - Reflections on Professional Practice: Standards-Based Assessment

Units: 2

Theoretical foundations, research, and best practices on assessing student achievement of K-12 content standards. Focus on the development of reliable, valid, and pragmatic assessment. *Prerequisites: Preliminary or Level I Teaching Credential; admission to the Multiple Subject Credential program.*

TED 5900 - Independent Study

Units: 1-4

Theatre Arts: Activity

THEA 1490 - Theatre Production Activity Courses: Costume or Backstage Activity A

Units: 2

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. May be repeated two times for credit, for a maximum of 6 units for this series.

THEA 1491 - Theatre Production Activity Courses: Musical Theatre Production A

Units: 4

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. *Co-requisites: Concurrent enrollment in a section of DANC 2120 -DANC 2125 Musical theatre Dance A B, C, D, E, F as designated by the director of the current musical production.* May be repeated two times for credit for a maximum of 12 units for this series.

THEA 1492 - Theatre Production Activity Courses: Stage Crew Activity A

Units: 2

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses

numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. May be repeated two times for credit, for a maximum of 6 units for this series.

THEA 1493 - Theatre Production Activity Courses: Production Staff Activity A

Units: 3

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. May be repeated two times for credit, for a maximum of 9 units for this series.

THEA 1494 - Theatre Production Activity Courses: Festival Activity A

Units: 2

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. May be repeated two times for credit, for a maximum of 6 units for this series.

THEA 1495 - Theatre Production Activity Courses: Studio Production Activity A

Units: 4

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. May be repeated two times for credit, for a maximum of 12 units for this series.

THEA 1497 - Theatre Production Activity Courses: Special Workshop or Production A

Units: 1-12

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. *Prerequisites: Consult department to confirm participation, assignment, course, and units. Only THEA 4497 may be applied to the major.* May be repeated once for credit. *CR/NC grading only for THEA 1497, THEA 2497, and THEA 3497. A-F grading only for THEA 4497.*

THEA 1499 - Theatre Production Activity Courses: Production Practicum A

Units: 4

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. May be repeated two times for credit, for a maximum of 12 units for this series.

THEA 2490 - Theatre Production Activity Courses: Costume or Backstage Activity B

Units: 2

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. May be repeated two times for credit, for a maximum of 6 units for this series.

THEA 2491 - Theatre Production Activity Courses: Musical Theatre Production B

Units: 4

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. *Co-requisites: Concurrent enrollment in a section of DANC 2120 -DANC 2125 Musical theatre Dance A B, C, D, E, F as designated by the director of the current musical production.* May be repeated two times for credit for a maximum of 12 units for this series.

THEA 2492 - Theatre Production Activity Courses: Stage Crew Activity B

Units: 2

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. May be repeated two times for credit, for a maximum of 6 units for this series.

THEA 2493 - Theatre Production Activity Courses: Production Staff Activity B

Units: 3

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. May be repeated two times for credit, for a maximum of 9 units for this series.

THEA 2494 - Theatre Production Activity Courses: Festival Activity B

Units: 2

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. May be repeated two times for credit, for a maximum of 6 units for this series.

THEA 2495 - Theatre Production Activity Courses: Studio Production Activity B

Units: 4

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. May be repeated two times for credit, for a maximum of 12 units for this series.

THEA 2497 - Theatre Production Activity Courses: Special Workshop or Production B

Units: 1-12

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. *Prerequisites: Consult department to confirm participation, assignment, course, and units. Only THEA 4497 may be applied to the major.* May be repeated once for credit. *CR/NC grading only for THEA 1497, 2497, and THEA 3497. A-F grading only for THEA 4497.*

THEA 2499 - Theatre Production Activity Courses: Production Practicum B

Units: 4

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. May be repeated two times for credit, for a maximum of 12 units for this series.

THEA 3490 - Theatre Production Activity Courses: Costume or Backstage Activity C

Units: 2

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. May be repeated two times for credit, for a maximum of 6 units for this series.

THEA 3491 - Theatre Production Activity Courses: Musical Theatre Production C

Units: 4

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. *Co-requisites: Concurrent enrollment in a section of DANC 2120 -DANC 2125 Musical theatre Dance A B, C, D, E, F as designated by the director of the current musical production.* May be repeated two times for credit for a maximum of 12 units for this series.

THEA 3492 - Theatre Production Activity Courses: Stage Crew Activity C

Units: 2

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. May be repeated two times for credit, for a maximum of 6 units for this series.

THEA 3493 - Theatre Production Activity Courses: Production Staff Activity C

Units: 3

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. May be repeated two times for credit, for a maximum of 9 units for this series.

THEA 3494 - Theatre Production Activity Courses: Festival Activity C

Units: 2

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. May be repeated two times for credit, for a maximum of 6 units for this series.

THEA 3495 - Theatre Production Activity Courses: Studio Production Activity C

Units: 4

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. May be repeated two times for credit, for a maximum of 12 units for this series.

THEA 3497 - Theatre Production Activity Courses: Special Workshop or Production C

Units: 1-12

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. *Prerequisites: Consult department to confirm participation, assignment, course, and units. Only THEA 4497 may be applied to the major.* May be repeated once for credit. *CR/NC grading only for THEA 1497, THEA 2497, and 3497. A-F grading only for THEA 4497.*

THEA 3499 - Theatre Production Activity Courses: Production Practicum C

Units: 4

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. May be repeated two times for credit, for a maximum of 12 units for this series.

THEA 4490 - Theatre Production Activity Courses: Costume or Backstage Activity D

Units: 2

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. May be repeated two times for credit, for a maximum of 6 units for this series.

THEA 4491 - Theatre Production Activity Courses: Musical Theatre Production D

Units: 4

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. *Co-requisites: Concurrent enrollment in a section of DANC 2120-DANC 2125 Musical theatre Dance A B, C, D, E, F as designated by the director of the current musical production.* May be repeated two times for credit for a maximum of 12 units for this series.

THEA 4492 - Theatre Production Activity Courses: Stage Crew Activity D

Units: 2

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. May be repeated two times for credit, for a maximum of 6 units for this series.

THEA 4493 - Theatre Production Activity Courses: Production Staff Activity D

Units: 3

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. May be repeated two times for credit, for a maximum of 9 units for this series.

THEA 4494 - Theatre Production Activity Courses: Festival Activity D

Units: 2

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. May be repeated two times for credit, for a maximum of 6 units for this series.

THEA 4495 - Theatre Production Activity Courses: Studio Production Activity D

Units: 4

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. May be repeated two times for credit, for a maximum of 12 units for this series.

THEA 4497 - Theatre Production Activity Courses: Special Workshop or Production D

Units: 1-12

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. *Prerequisites: Consult department to confirm participation, assignment, course, and units. Only THEA 4497 may be applied to the major.* May be repeated once for credit. *CR/NC grading only for THEA 1497, THEA 2497, and THEA 3497. A-F grading only for THEA 4497.*

THEA 4499 - Theatre Production Activity Courses: Production Practicum D

Units: 4

Participation in preproduction or performance. Consult department office for course appropriate to desired assignment. First-year students take courses numbered 1490-1499; second-year students, courses numbered 2490-2499; third-year students, courses numbered 3490-3499; and fourth-year students, courses numbered 4490-4499. May be repeated two times for credit, for a maximum of 12 units for this series.

Theatre Arts: Theatre

THEA 1005 - How to See a Play

Units: 4

An introduction to contemporary drama on the stage. How the printed play is translated into visual and aural images. Attendance at selected theatre events is required. Recommended for non-majors.

THEA 1006 - A Peek Behind the Scenes

Units: 4

The artistic and production process involved in mounting a show. The current theatre or dance show as it happens from construction and rehearsal to opening and audience response. How literature or ideas are interpreted and rendered into live entertainment.

THEA 1013 - Ancient World Theatre

Units: 4

Dramatic texts of ancient theatre, especially ancient Greek and Roman periods. Special emphasis on performance space, costumes, and masks. Exercises to reveal how theatre artists analyze literature.

THEA 1016 - All the World's a Stage: Theatre for Social Change

Units: 4

Ethnic, racial, and gender obstacles to creative expression in theatre; artists as outlaws, rebels and people outside the mainstream. Plays of artists working for social change in the U.S. Play attendance required. Not open to students with credit for THEA 1010.

THEA 1020 - Discover Acting

Units: 3

Introduction to acting techniques to improve self-expression and observation skills. An introductory acting course designed for non- majors. Suitable as an elective for those who work with people of all ages in education, recreation, business and mass communication.

THEA 1021 - Black Experience in Performance

Units: 4

Study of slave journals, blues, plays, poetry, and various performance traditions created by African Americans and their effect on artistic development in the United States and abroad. Exercises in script and manuscript analysis, acting, and directing.

THEA 1022 - Keeping It Real: How Race Matters in Pop Culture

Units: 4

The role race plays in the creation of American Pop Culture. The influence of artists of color on popular culture. Project involving creation of a script based on personal experience with issues of color.

THEA 2031 - Stage Voice A

Units: 1

Fundamentals of voice production. Includes warm-ups, resonance, relaxation, projection, and breath control. May be taken out of sequence with permission of instructor. Each may be repeated once, for a maximum of 2 units each. Only 2 units may be applied to Beginning Electives and/or an Option in the major.

THEA 2032 - Stage Voice B

Units: 1

Fundamentals of voice production. Introduces articulation, emphasis, and Standard American Speech in use in classic repertoire. May be taken out of sequence with permission of instructor. Each may be repeated once, for a maximum of 2 units each. Only 2 units may be applied to Beginning Electives and/or an Option in the major.

THEA 2035 - Fundamentals of Acting

Units: 3

Emphasis on scene specific improvisation, text analysis, identification of objectives, actions, and obstacles. Attention also given to freeing character through animal imagery, inanimate imagery, body centers, character analysis, given circumstances, and personalization. *Prerequisites: Majors-one year of stage voice; Others-THEA 1020 or instructor approval.*

THEA 2037 - Acting 20th Century Drama and Diversity

Units: 3

Exploration of acting, movement, and vocal technique through scripts from contemporary playwrights of various races, ethnicities, and cultures. Emphasis on character development. Exercises for connecting to personal experience, freeing the imagination, and personal discovery. *Prerequisites: THEA 2035 and THEA 2055 or instructor approval.*

THEA 2044 - Fundamental Musical Theatre Techniques

Units: 3

Introduction to Musical Theatre performance. How to embody a song for stage. Combining singing, acting and dance skills to illuminate character intention, emotion, and mood. Musicality and basic audition technique. Concludes with juried showcase of performance skills and progress. *Prerequisites: THEA 2035 or instructor approval. A-F grading only.*

THEA 2045 - Applied Singing for Musical Theatre A

Units: 1

Introduction to scores, exercises, vocalization, and basic musicianship. Breathing technique; jaw, tongue and soft palate placement; placing the sound in the mask or head resonators; and expanding vocal range. Building solo repertoire from a range of musicals. *AF grading only.*

THEA 2046 - Applied Singing for Musical Theatre B

Units: 1

Introduction to scores, exercises, vocalization, and basic musicianship. Breathing technique; jaw, tongue and soft palate placement; placing the sound in the mask or head resonators; and expanding vocal range. Building solo repertoire from a range of musicals. *AF grading only.*

THEA 2047 - Applied Singing for Musical Theatre C

Units: 1

Introduction to scores, exercises, vocalization, and basic musicianship. Breathing technique; jaw, tongue and soft palate placement; placing the sound in the mask or head resonators; and expanding vocal range. Building solo repertoire from a range of musicals. *AF grading only.*

THEA 2055 - Intermediate Acting I

Units: 2

Exploration of personal behavior under a variety of circumstances. Self-observation to create a reality. Selecting pertinent behavior and finding meaningful actions. Given circumstances, objectives, fourth wall, concentration, sense of self, and moment to moment involvement. *Prerequisites: THEA 2035 or instructor approval.*

THEA 2061 - Musical Theatre Show Choir A

Units: 2

Performance of songs from the American and British musical theatre repertoire; skills in various musical theatre styles, both solo and group, including song interpretation, dance, and acting skills. Class performs on and off campus.

THEA 2062 - Musical Theatre Show Choir B

Units: 2

Performance of songs from the American and British musical theatre repertoire; skills in various musical theatre styles, both solo and group, including song interpretation, dance, and acting skills. Class performs on and off campus.

THEA 2063 - Musical Theatre Show Choir C

Units: 2

Performance of songs from the American and British musical theatre repertoire; skills in various musical theatre styles, both solo and group, including song interpretation, dance, and acting skills. Class performs on and off campus.

THEA 2072 - Cultural Groups in Performance

Units: 4

Production, rehearsal, and performance of a show that focuses on a specific cultural group. Attend first meeting or call department for cultural theme. Only 4 units credit from THEA 2072 or THEA 3072 is applicable to the Theatre Arts major. THEA 2072 and THEA 3072 may be repeated for credit, for a combined maximum of 16 units.

THEA 2073 - Beginning Solo Plays from Personal Experience A

Units: 3

Making your point using personal experiences. Writing and performance techniques that maximize impact for your audience.

THEA 2074 - Beginning Solo Plays from Personal Experience B

Units: 3

Making your point using personal experiences. Writing and performance techniques that maximize impact for your audience.

THEA 2075 - Beginning Solo Plays from Personal Experience C

Units: 3

Making your point using personal experiences. Writing and performance techniques that maximize impact for your audience.

THEA 2078 - Solo Performance: Production

Units: 4

Production, rehearsal, and performance of a touring performance or show that focuses on plays developed in the Solo Performance series. May be repeated once for credit, for a maximum of 8 units. Only 4 units credit from THEA 2078 or THEA 3078 may be applied to meet a department Production and Performance requirement.

THEA 2211 - Asian Thought in Theatre

Units: 4

Asian thought as portrayed in Asian Performance and the role of Asian thought and performance techniques in U.S. and world theatre.

THEA 2212 - From Stage to Screen: Dramas and the Films They Inspired

Units: 4

Great works of dramatic literature from Classical Greece to modern times compared with films based on them. Exploration of intellectual, social, political, and personal issues raised in these works. Stage and film methods compared.

THEA 2214 - The Plays of Arthur Miller

Units: 4

The major plays of Arthur Miller and their social, political, and philosophical significance for American lives and culture. Students will perform key scenes. Field trips may be required.

THEA 2222 - Sexual Imagery and Performance

Units: 4

How works of Western and American theatre both illuminate and are defined by contemporary American intellectual and cultural issues, such as censorship, gender identity, body image, legal definitions of obscenity, social relationships, and privacy.

THEA 2223 - Queering the Stage: Gay, Lesbian, Bisexual and Transgender Theatre in America

Units: 4

How foundational works in GLBT Theatre both illuminate and are defined by contemporary American intellectual and cultural concerns, such as identity, navigating dual identity, confronting oppression, prejudice, violence, and negotiating a place in the traditional social framework.

THEA 2225 - America on Stage

Units: 4

Overview of American Theatre from its beginning to the present, including reflection on the values and culture of a changing America portrayed on the stage.

THEA 2226 - Women in Performance

Units: 4

Roots of U.S. culture in roles of women artists, including traditional gender-based performance forms. The female body in theatre. Includes some women artists of Europe, Africa, and Pacific Rim who have influenced or been influenced by U.S. culture.

THEA 2269 - Arts and Media of the Golden State

Units: 4

The role of creativity in California, the mass-media cultural center of the world, including the stage, screen, recording industry, media, Silicon Valley, and gaming. Introduction to arts and media forms with an emphasis on the roles of delivery and content in developing a personal understanding and appreciation for arts and culture. Requires attendance at on- and off- campus arts and cultural events. Not open to students with credit for MUS 2269.

THEA 2310 - Oral Interpretation of Literature

Units: 4

The artistic process of studying literature through performance. The critical analysis of texts and guided practice in the effective use of voice and body to communicate poetry, prose, and dramatic texts.

THEA 2421 - Fundamental Backstage Technology: Wood Scenery: Walls and Levels

Units: 1

Basic techniques of production for performance situations. Lights course includes stage and TV. Effects course includes pyro, fog, and releases. Open to non-majors. May be repeated once with consent of department, for a maximum of 2 units. Only 1 unit may be applied to the Theatre Arts major.

THEA 2422 - Fundamental Backstage Technology: Costume Technique

Units: 1

Basic techniques of production for performance situations. Lights course includes stage and TV. Effects course includes pyro, fog, and releases. Open to non-majors. May be repeated once with consent of department, for a maximum of 2 units. Only 1 unit may be applied to the Theatre Arts major.

THEA 2423 - Fundamental Backstage Technology: Lights: Hanging and Focus

Units: 1

Basic techniques of production for performance situations. Lights course includes stage and TV. Effects course includes pyro, fog, and releases. Open to non-majors. May be repeated once with consent of department, for a maximum of 2 units. Only 1 unit may be applied to the Theatre Arts major.

THEA 2424 - Fundamental Backstage Technology: Sound: Recording

Units: 1

Basic techniques of production for performance situations. Lights course includes stage and TV. Effects course includes pyro, fog, and releases. Open to non-majors. May be repeated once with consent of department, for a maximum of 2 units. Only 1 unit may be applied to the Theatre Arts major.

THEA 2425 - Fundamental Backstage Technology: Stage Effects

Units: 1

Basic techniques of production for performance situations. Lights course includes stage and TV. Effects course includes pyro, fog, and releases. Open to non-majors. May be repeated once with consent of department, for a maximum of 2 units. Only 1 unit may be applied to the Theatre Arts major.

THEA 2428 - Fundamental Backstage Technology: Sound: PA

Units: 1

Basic techniques of production for performance situations. Lights course includes stage and TV. Effects course includes pyro, fog, and releases. Open to non-majors. May be repeated once with consent of department, for a maximum of 2 units. Only 1 unit may be applied to the Theatre Arts major.

THEA 2429 - Fundamental Backstage Technology: Practical Drafting and Model Building

Units: 1

Basic techniques of production for performance situations. Lights course includes stage and TV. Effects course includes pyro, fog, and releases. Open to non-majors. May be repeated once with consent of department, for a maximum of 2 units. Only 1 unit may be applied to the Theatre Arts major.

THEA 2430 - Fundamental Backstage Technology: Practical Make-up

Units: 1

Basic techniques of production for performance situations. Lights course includes stage and TV. Effects course includes pyro, fog, and releases. Open to non-majors. May be repeated once with consent of department, for a maximum of 2 units. Only 1 unit may be applied to the Theatre Arts major.

THEA 2450 - Vectorworks CADD for Lights and Scenery

Units: 1

Extends basic drafting skills into the digital domain of CADD. Especially for light and scenery designers, but skills are applicable to other careers. Techniques sufficient to create plans for a set or to draw a light plot and stage cross section. May be repeated once for credit, for a maximum of 2 units. Only 1 unit may be applied to the Theatre Arts major.

THEA 3000 - Theory of Theatre Performance

Units: 4

A series of theatre activities to demonstrate the nature and execution of theatre performance. Combines improvisation, physicalization of subtext, creative dramatic techniques, and explorations of collaborative performance.

THEA 3041 - Advanced Applied Singing for Musical Theatre I

Units: 1

Continued development of healthy singing technique. Emphasis on song interpretation, approaching the song as a monologue, using personal identification to the text, and visualizing imaginary images while singing. *Prerequisites: THEA 2045, THEA 2046, THEA 2047, or instructor approval.* May be repeated once for credit for a maximum of 2 units, only one attempt applicable to major option. *A-F grading only.*

THEA 3042 - Advanced Applied Singing for Musical Theatre II

Units: 1

Continued development of healthy singing technique. Emphasizes song interpretation, approaching the song as a monologue, personal identification with the text, and visualization of imaginary images while singing. *Prerequisites: THEA 2045, THEA 2046, THEA 2047, THEA 3041, or instructor approval.* May be repeated once for credit for a maximum of 2 units, only one attempt applicable to major option. Not for credit in the Theatre major but required for progress in the Technique and Ensemble classes. *A-F grading only.*

THEA 3043 - Advanced Applied Singing for Musical Theatre III

Units: 1

Continued development of healthy singing technique. Emphasizes song interpretation and telling a complete short story with a song. Song repertoire will consist of cabaret story songs from the works of Charles Aznavour, Kander and Ebb, Kurt Weil, and others. *Prerequisites: THEA 2045, THEA 2046, THEA 2047, and THEA 3041, THEA 3042, or instructor approval.* May be repeated once for credit for a maximum of 2 units, only one attempt applicable to major option. *A-F grading only.*

THEA 3048 - Musical Theatre Technique I

Units: 3

Acting while singing, including character development, revealing psychological intention, and moving the plot forward. Analyzing scenes with two or more characters that segue into songs. Breaking down scenes for actions, objectives and obstacles. *Prerequisites: THEA 2044 or instructor approval. A-F grading only.*

THEA 3049 - Musical Theatre Technique II

Units: 3

Acting while singing and scene to song transition. Scenes with three or more characters that segue into musical trios, quartets, and larger groups. Character development, moving plot forward, and revealing psychological intention. Concludes with juried showcase to evaluate progress. *Prerequisites: THEA 3048 or instructor approval. A-F grading only.*

THEA 3050 - Teleplay Acting and Production Workshop

Units: 4

Producing original television movie for cable broadcast. Primarily advanced camera acting techniques, includes some studio operation. Some roles may be assigned during previous quarter to students in THEA 3052. May be repeated once for credit.

THEA 3052 - Acting for the Camera

Units: 4

Acting in television drama; preparation for interviews and other television appearances. Prepares students for acting and production opportunities in CSUEB creative video courses. Recommended preparation: THEA 1020, COMM 3100, or ENGL 3077.

THEA 3056 - Intermediate Acting II

Units: 2

Using personal behavior and self-observation to create a reality. Selecting pertinent behavior and finding meaningful actions. Establishing given circumstances, clarifying objectives, creating fourth wall, strengthening concentration, expanding sense of self, and increasing moment to moment involvement. *Prerequisites: Instructor approval.*

THEA 3057 - Intermediate Acting III

Units: 2

Using personal behavior and self-observation to create a reality. Selecting pertinent behavior and finding meaningful actions. Establishing given circumstances, clarifying objectives, creating fourth wall, strengthening concentration, expanding sense of self, and increasing moment to moment involvement. *Prerequisites: Instructor approval.*

THEA 3058 - Intermediate Acting: Voice and Movement Techniques

Units: 3

For intermediate and advanced students. Incorporating body and voice into the art of stage acting. Emphasis on creating a powerful and unified vocal and physical presence on stage. Focus on accessing classical texts. *Prerequisites: THEA 2031, THEA 2032, one previous acting class, or consent of the instructor.* Repeatable for a maximum of 6 units. *Satisfies GE Area: F - Performing Arts and Activities.*

THEA 3061 - Period Acting

Units: 2

Stylized acting technique applicable to works from selected periods and locales. Emphasis on Western, but includes content from at least one non-Western genre. Consult instructor about specific content. *Prerequisites: Any lower-division acting course.* May be repeated once for credit, for a maximum of 4 units. A maximum of 4 units are applicable to the major.

THEA 3064 - Audition Techniques and Talent Analysis I

Units: 1

Audition techniques using monologues, scene work, and cold reading. Developing head shots and resumes. Self-marketing based on analysis of personal talents and type. *Co-requisites: One of THEA 1494, 2494, 3494, 4494, 2055, 3042, or 3043. A-F grading only.*

THEA 3065 - Audition Techniques and Talent Analysis II

Units: 1

Audition techniques using monologues, scene work, and cold reading. Developing head shots and resumes. Self-marketing based on analysis of personal talents and type. *Co-requisites: One of THEA 1494, 2494, 3494, 4494, 2055, 3042, or 3043. A-F grading only.*

THEA 3070 - Leadership in Cultural Production

Units: 2

Practical production planning for theatre and dance shows that focus on specific cultural groups. Staffing, resources, and scripting. Course does not meet a department Production and Performance requirement. May be repeated two times for credit, for a maximum of 6 units.

THEA 3071 - Creating a Cultural Production

Units: 2

Practical playwriting for shows that focus on specific cultural groups. Course does not meet a department Production and Performance requirement. May be repeated two times for credit, for a maximum of 6 units.

THEA 3072 - Cultural Groups in Performance

Units: 4

Production, rehearsal, and performance of a show that focuses on a specific cultural group. Attend first meeting or call department for cultural theme. Only 4 units credit from 2072 or 3072 is applicable to the Theatre Arts major. THEA 2072 and 3072 may be repeated for credit, for a combined maximum of 16 units.

THEA 3073 - Solo Performance: Research Methods

Units: 3

Research methods for enhancing solo plays that are based on personal experiences. Using science, social science, and humanities scholarship to make a convincing case for the lessons in your play. Course does not meet a department Production and Performance requirement.

THEA 3074 - Solo Performance: Talk Story Techniques

Units: 3

Techniques for making a play from primary sources and interviews. Writing and performance techniques that maximize impact for your audience. Course does not meet a department Production and Performance requirement.

THEA 3075 - Solo Performance: Writing about Political and Social Issues

Units: 3

Techniques for making a play based on political and social issues. Writing and performance techniques that maximize impact for your audience. Course does not meet a department Production and Performance requirement.

THEA 3078 - Solo Performance: Production

Units: 4

Production, rehearsal, and performance of a touring performance or show that focuses on plays developed in the Solo Performance series. May be repeated once for credit, for a maximum of 8 units. Only 4 units credit from THEA 2078 or 3078 may be applied to meet a department Production and Performance requirement.

THEA 3201 - Classical Greek and Roman Drama

Units: 4

The historic development of early classical drama from the Greek period through the Roman, including the study of representative plays, theatre architecture, and production. Individual research on selected topics.

THEA 3202 - European Medieval and Renaissance Drama

Units: 4

The historic development of European drama from the Medieval period through the Italian Renaissance, Elizabethan period, and 17th Century, including the study of representative plays, theatre architecture, and production. Individual research on selected topics.

THEA 3203 - Modern European Drama

Units: 4

The historic development of European drama from 1800 to the present, including study of representative plays, physical aspects of the theatre, and production practices. Individual research on selected topics.

THEA 3207 - Modern American Theatre

Units: 4

Study of representative American playwrights and their theatre from 1920 to the present. Individual research on selected topics.

THEA 3208 - Postmodern Theatre

Units: 4

Development of postmodern theatre with its emphasis on the mixing of different styles and periods, its interspersing of multiple meanings in a text performance, and its self-consciousness about performance itself. Individual research on selected topics.

THEA 3209 - Sex, Love, and Women on Stage and in Film

Units: 4

Theatre and film as art forms shaping and reflecting culture and values, especially through images of sex, love, and women at different periods in history. Written critique of scripts and/or performances.

THEA 3216 - History of Musical Theatre

Units: 4

Musical theatre from 1866 to the present; 19th-century minstrel and variety shows; the theatre of social change in the 20's and 30's; and "concept" musicals after 1970. Requires theatre attendance.

THEA 3217 - Theatre of Horror

Units: 4

American Horror and Science Fiction with roots in French Grand Guignol (gory effects) and German Expressionism. Landmarks that advanced the forms on stage and film. How Cold War fears and emerging technology spawned iconic films leading back to contemporary theatre. Not for credit in Theatre major or minor.

THEA 3220 - The History of Black Theatre

Units: 4

Influence of twenty-five centuries of African Diaspora on theatre of Europe and North America. Black influence on playwriting, movies and television; Ancient Greek, Medieval, and Shakespearean performance styles; Minstrel theatre; the Harlem Renaissance; and the Black Arts Movement.

THEA 3225 - Theatre Today

Units: 4

Methods for developing a critical viewpoint on theatrical production through observation and analysis of production elements. Includes historical perspectives. Attendance at a variety of theatre events is required. May be used as major elective by advisement only.

THEA 3230 - Shakespeare on Film

Units: 4

Selected plays of Shakespeare shown on film in class. Discussion of literature, interpretations, techniques and concepts of plays as adapted for film and historic setting. Attendance at one live performance may be required for comparative purposes.

THEA 3253 - Theatre Through the Ages

Units: 4

Historical development of classical drama of a specific period, usually either Greek/Roman or Medieval/Renaissance/Shakespeare; the evolving performance space and production technique; representative literature and its influence on world theatre; research on selected topics.

THEA 3254 - Scenery, Lights, and Sound Concepts

Units: 4

Techniques and principles of sets, lighting, and sound for the performing arts. Emphasizes design basics, tools, construction methods, reading plans, hanging and focusing lights, sound PA and production, props, drafting floor plans, and practical projects.

THEA 3255 - Costumes and Makeup Concepts

Units: 4

Techniques and principles of costumes and makeup for the performing arts. Emphasizes design basics, clothing construction, research methods, rendering techniques, makeup theory, and practical projects.

THEA 3256 - Directing: Text to Stage

Units: 3

Transformation of text to stage images. Signs and symbols of production elements. Scrutinize arts and myth, experiment in deconstruction, collage, and mise en scene. Basic directing.

THEA 3257 - Design for Stage

Units: 3

Aesthetics and practice of scenography, lighting, and costume in the performing arts. Techniques of drawing, painting, model building, research, and light plots. *Prerequisites: Consent of instructor.*

THEA 3310 - Interpretation of Women's and Ethnic Literature

Units: 4

Research, selection, and analysis of literature contributing to U.S. culture by women and ethnic minorities. Rehearsal and performance as Readers' Theatre.

THEA 3311 - Filipino Theatre

Units: 4

A beginning to intermediate practicum in theatre of the Philippines. Literature, acting, and theatrical aspects; includes a performance. May be repeated once for credit, for a maximum of 8 units.

THEA 3315 - Multicultural Theatre Troupe

Units: 4

Techniques for performing before multicultural audiences. Oriented for non-majors. Involves off-campus shows.

THEA 3326 - Ethnic Women Playwrights and Performers

Units: 4

The contributions of ethnic women to contemporary American theatre; the playwright as agent for broader social change through revelation of hidden prejudice and privilege. Field trips required.

THEA 3422 - History of Costume

Units: 4

The historic development of Western costume from Egyptian to modern styles.

THEA 3423 - Non-Western Costume

Units: 4

The development of non-Western clothing and costume. The important influences of Chinese, Japanese, Indonesian, Indian, and African clothing on all cultures. Recommended for nonmajors.

THEA 3424 - Scene Painting and Graphic Language

Units: 4

Exploration of methods of scenic painting. Problems in rendering, models, and full scale painting using scenic color media, texture treatment, and light and shadow techniques.

THEA 3426 - The Art of the Kimono

Units: 4

Study of the Japanese kimono as costume in traditional Noh, Kabuki, and Bunraku drama, as well as its influence on Western fashion and theatre design. Includes history of the Kimono and construction techniques.

THEA 3427 - Fashion History

Units: 4

Overview of fashionable clothing throughout history with a focus on the 20th Century. Mainly western perspective, but includes world influences on fashion especially since the 19th Century.

THEA 3428 - Fashion Design

Units: 4

Design and technical practices in fashion from conception to the runway. Includes activities such as developing concepts, color sketching, selecting fabrics, garment construction, and dressing the model.

THEA 3487 - Voice for Shakespearean and Period Theatre

Units: 2

Vocal techniques required for speaking in Shakespearean and other period plays.

THEA 3610 - Interpretation of Children's Literature and Story Telling

Units: 4

Techniques of story telling; selection and practice in reading poetry and prose for children. Suggested for elementary teachers and theatre majors.

THEA 3650 - Dramatic Activities for Children

Units: 4

Creative dramatics as a tool for building and developing the creative capacities of children. Includes theatre games, improvisation, puppetry, mask making, and other drama activities.

THEA 3660 - Children's Theatre Performance

Units: 4

Theory and techniques of producing theatre for children, including preparation and rehearsal for annual production. May be repeated two times for credit, for a maximum of 12 units. Majors may substitute 8 units of THEA 3660 for THEA 3181.

THEA 3898 - Cooperative Education

Units: 1-4

Supervised work experience in which student completes academic assignments integrated with off-campus paid or volunteer activities. *Prerequisites: At least a 2.0 GPA; departmental approval of activity.* May be repeated, for a maximum of 8 units. Only 4 units may be applied to the Theatre Arts major. Only 4 units may be applied to the Theatre minor.

THEA 3999 - Issues in Theatre

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in theatre. May be repeated for credit when content varies, for a maximum of 8 units.

THEA 4032 - Period Acting Style: Restoration and Moliere

Units: 3

Technique and physical style for British Restoration and Moliere. Exercises and scene work to increase skills repertoire. Using costumes, mannerisms, body positions, and commedia stock characters. Political and social changes that gave rise to classic theatrical visions of satire. Strongly Recommended: THEA 2055. Six hrs. act.

THEA 4034 - Period Acting Style: Shakespeare

Units: 3

peare. Exploration of imagery and psychological motivation in bringing the bard's characters to life. Soliloquy and scenes. Strongly Recommended: THEA 2055. Six hrs. act.

THEA 4038 - Acting Studio I

Units: 3

Classroom workshop productions of one act plays, short plays, and new works. Plays from various styles and periods. Provides opportunity to develop a main character and bring them to life in performance. The complete acting process. Strongly Recommended: THEA 2055. Six hrs. act.

THEA 4039 - Acting Studio II

Units: 3

Classroom workshop productions of one act plays, short plays, and new works. Plays from various styles and periods. Provides opportunity to develop a main character and bring them to life in performance. The complete acting process. Strongly Recommended: THEA 2055. Six hrs. act.

THEA 4040 - Musical Theatre Journal Review

Units: 1

Musical Theatre Option majors required to maintain a developmental journal from second year to include course and performance reflections, literature and character studies, personal repertoire list, and audition materials. Required fourth year for

senior review. Open to third year students with advising. May be repeated once for credit for a maximum of 2 units. *A-F grading only.*

THEA 4048 - Advanced Musical Ensemble A

Units: 3

Focus on rehearsal technique and performance. Small ensemble musicals or musical revues to be performed on campus and at local high schools. Attention given to effective rehearsal technique, working as an ensemble, heightened lyricism, and acting technique. *Prerequisites: THEA 3048 and THEA 3049, or instructor approval. A-F grading only.*

THEA 4049 - Advanced Musical Ensemble B

Units: 3

Focus on rehearsal and audition technique in preparation for beginning a career as a professional artist. Exercises to prepare for the audition setting. Making strong movement choices; learning and performing songs and scenes quickly. *Prerequisites: THEA 3048 and THEA 3049, or instructor approval. A-F grading only.*

THEA 4151 - Senior Festival Preproduction

Units: 3

Preparation for senior culmination performing arts project. May substitute full-time internship in professional environment. Open to non-major performers and technicians with some experience. *Prerequisites: Consent of instructor.* May be repeated once for credit, for a maximum of 6 units. Applying repeat units to major requires Chair exception.

THEA 4152 - Senior Festival Performance

Units: 3

Performance of senior culmination performing arts project. May substitute full-time internship in professional environment. Open to non-major performers and technicians with some experience. *Prerequisites: Consent of instructor.* May be repeated once for credit, for a maximum of 6 units. Applying repeat units to major requires Chair exception.

THEA 4155 - Career Management Issues in Theatre Arts

Units: 4

How artists, in their careers, relate to management, industry, government, and society in general. Career management and arts administration topics. Commercial and non-profit business structures and methods.

THEA 4375 - Ethnic and Immigrant Theatre in the United States

Units: 4

How ethnic groups have used theatre as a secular ritual, a means of self-expression, and as a search for identity. Most attention to the theatre of African, Asian, and Latin Americans; Yiddish and Italian immigrants also covered. Particular emphasis on local theatre companies, including visits to see their productions.

THEA 4418 - Advanced Makeup and Maskmaking

Units: 2

Advanced study of makeup for the theatre. Special makeup effects and mask making, including construction techniques. Use of masks as visual art. Mask techniques for teachers. May be repeated once for credit, for a maximum of 4 units.

THEA 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

Women's Studies

WOST 1001 - Perspectives on Women

Units: 4

The observed similarities and differences in the behavior of women and men as seen from the perspective of art, history, literature, philosophy, biology, and psychology. How these differences came about and what the future may hold.

WOST 1002 - Women in Contemporary Society

Units: 4

Women's work, family roles, political behavior, and legal status today. Controversial issues raised by the women's movement explored from the perspective of different racial/ethnic groups and different political/economic/social systems.

WOST 1100 - Introduction to Feminist, Gender, and Sexuality Studies

Units: 4

Focuses on understanding power hierarchies that structure gender and sexuality. Investigates how gender intersects with race, ethnicity, class, sexuality, age, religion, relevant debates, beliefs, practices, and political struggles.

WOST 1200 - Perspectives on Women in the U.S.

Units: 4

Critical inquiry on women's lives and gender roles through a feminist lens. Topics may include theories of gender and sexuality, constructions and practices of femininity, sexual objectification, sexual politics, sexual/social violence, mitigated by race, class, gender, religion, and age.

WOST 1300 - Femininity and Masculinity

Units: 4

Introduction to social construction and cultural representation of femininity and masculinity. Conceptions of masculinity and femininity influenced by race, class, ethnicity, sexuality and age. Explores connection between biological sex, notions of masculinity and femininity, and subversive gender performance.

WOST 2100 - Theories of Sexuality

Units: 4

Introduction to theories, empirical scholarship, public policies, and current controversies on the topic of sexuality. Focus on sexual development, lifestyles, and communities with additional emphasis on ethnicity, race, gender, class, and nationality.

WOST 2200 - Roots of Feminisms

Units: 4

Pre-twentieth century texts and historical events providing foundations for the development of contemporary feminist theories

and practices. Analysis of writings that legitimated patriarchal/misogynist ideologies in Western worlds, such as Plato, Aristotle, and founders of world religions, from a feminist perspective.

WOST 3030 - Immigrant and Refugee Women

Units: 4

(See ES 3030 for course description.)

WOST 3050 - Feminist Theory

Units: 4

Feminist theories of American women's liberation movement from mid-sixties to present. Gender identity; "nature vs. nurture" theories of female subservience and male domination; pornography; rape; class, race, and gender.

WOST 3110 - Theories of Feminism I

Units: 4

Overview of feminist theories, including issues of representation, agency and subjectivity, capitalism and patriarchy. Covers "first wave" statements to "second wave" feminism, including liberal, radical, separatist, and socialist/materialist forms of feminism. Exposure to self-assumptions, application of analytical skills to one's own life and work.

WOST 3200 - Theories of Feminism II

Units: 4

Continuation of WOST 3110, Theories of Feminism I. Offers perspectives on intersectional feminist theory and contemporary issues in feminist thought from "second wave" feminism to present, including post-structuralism and postmodernism, postcolonialism and third-world feminism, ecofeminism and current feminist theoretical debates. *Prerequisites: WOST 3110.*

WOST 3300 - Women, Law, Policy and Activism in the Contemporary U.S.

Units: 4

Feminist perspective on how U.S. law confers rights, creates obligations, and defines identities which impact social actors differently. Topics may include educational and workplace equity, privacy, family law, domestic violence, LGBT rights, reproductive rights, affirmative action and equal protection laws.

WOST 3400 - Women and Careers

Units: 4

Women's experience in the workforce from a political, sociological and historical perspective. Comparison of structure and practices in the corporate structure to those in sports and the military. Obstacles women face, coping mechanisms and strategies for success.

WOST 3420 - Minority Women in America

Units: 4

Persistence and change in the minority female experience in America. Focus on prominent stereotypes of minority women, patterns of courtship and marriage, employment and career trends, birth control and sexual freedom, and feminism and racial solidarity. Cross-listed ES 3420.

WOST 3440 - Women and Social Constructions of Sexuality

Units: 4

Relationship of modern sexualities and the rise of capitalism, secularism, urbanization, sexology, and sexual identity politics. Sexuality as a complex array of social codes, forces, and institutionalized power relations. Topics may include: objectification and commodification, sexual politics, sexual/social violence and resistance.

WOST 3520 - Mothers, Daughters, and Sons

Units: 4

The relationship between mothers and their daughters and sons from a literary, psychological, and sociological point of view. Discussion of literature, film and art.

WOST 3530 - Women and Their Bodies

Units: 4

An interdisciplinary course focusing on women's experiences of their bodies, especially in the areas of health and sexuality.

WOST 3545 - Women's Health and Health Care

Units: 4

Social, political, and economic perspective on current health status and health needs of women in the United States, especially in the areas of reproduction, genetic testing, and chronic illnesses such as heart disease and cancer.

WOST 3550 - Women, Work, and Family Life

Units: 4

The relationship of work and family, the dilemmas women face and strategies they use to negotiate work/family issue. The impact of economic/historical/sociological factors including gender, race, and class, all influencing work and family life.

WOST 3600 - Women and Work in the U.S.

Units: 4

Patterns of women's labor; focus on debates of definition of "work," occupational sex segregation, patterns of paid and domestic labor, gender inequality, work and family issues; experiences of labor (and labor exploitation) according to race, class, sexuality, ethnicity, immigrant status

WOST 3700 - Comparative Perspectives on Global Feminisms

Units: 4

Women globally in transnational and local contexts; issues of economic and social justice. Including violence against women and children, poverty, economic and international migration, political fundamentalism, globalization of capitalist economy, sexual and civil rights, immigration and citizenship, and sex trafficking.

WOST 3800 - Women and Consumption

Units: 4

Feminist perspectives used to explore the commodification of women's bodies which support globalized capitalist economies through labor and consumerism. Practices of women's consumption and the consumption of women as critiqued from feminist, Marxist, and global/environmental perspectives.

WOST 3810 - Domestic Discontents in the Contemporary U.S.

Units: 4

Feminist analysis of problems facing contemporary U.S. families including household division of labor and changes in economic and social roles for women; marriage as a political institution. Topics may include occupational segregation, carework, welfare, economics of marriage, divorce, child custody.

WOST 3850 - Research Practices and Methods for Feminist Scholarship

Units: 4

Interdisciplinary feminist research methods. Feminist critique of social science research methods, exposing tension between the production and interpretation of data and the importance of considering power relations in the formation of knowledge; testing various social science research methods.

WOST 3900 - Violence Against Women

Units: 4

Violence in intimate relationships from a feminist perspective. Violence against women and girls as instituting structured gender inequality and as perpetrated by political, social and economic institutions locally, nationally, and internationally.

WOST 3999 - Issues in Women's Studies

Units: 4

Readings, discussion, and research on contemporary and/or significant issues in women's studies. May be repeated for credit when content varies, for a maximum of 8 units.

WOST 4130 - Women in Midlife Transition

Units: 4

Examination of development and change in behavior of women in the United States at midlife transition, with emphasis on theory, method, and empirical research. *Prerequisites: Upper division standing.*

WOST 4160 - Women and Aging

Units: 4

Examination of development and change in behavior of women as they age in the United States, with emphasis on theory, method, and empirical research. Prerequisite: Upper division standing.

WOST 4200 - Gender, Sexuality and Popular Culture in the U.S.

Units: 4

Feminist perspective on meaning and construction of masculinity, femininity, sexuality, and stereotypes in both mainstream and sub-cultural popular culture contexts (film, fiction, non-fiction, theater, music, television, journalism, Internet) with particular attention to race, ethnicity, class, sexuality, age, disability, and nationality.

WOST 4300 - Women and Global intersecting Structures of Oppression

Units: 4

Sexism, racism, classism, heterosexism, nationalism, ethnocentrism, ageism, and ideologies intersect to shape systems of oppression with particular attention paid to education, political economies, and media across the globe. Examines how women have worked collectively and individually to resist oppression.

WOST 4500 - Feminist Thought into Action

Units: 4

Relationship between feminist research and community/political activism. State of women's activism today locally, nationally, and globally; social justice for women and girls. Includes identifying goals, contacting media outlets, writing grant proposals, and negotiating ethical issues in feminist praxis.

WOST 4600 - Action Research Seminar I

Units: 4

First quarter of a two-quarter senior thesis seminar. Thesis is an applied research project which synthesizes coursework and two-quarters of fieldwork, includes project's significance, methodology, thorough documentation and relevant conclusions or recommendations. *Prerequisites: Senior standing, WOST 4400 and WOST 4500 Co-requisites: WOST 4700.*

WOST 4700 - Action Fieldwork in Women's Studies I

Units: 4

First quarter of a two-quarter service learning fieldwork placement arranged through instructors. Initial fieldwork data collection for senior thesis; outline plan developed individually between student and faculty sponsor. Analytic journal required. *Prerequisites: Senior standing, WOST 4400 and WOST 4500 Co-requisites: WOST 4600.*

WOST 4800 - Action Fieldwork in Women's Studies II

Units: 4

Second quarter of two-quarter service learning fieldwork placement arranged through instructors. Continued research fieldwork data collection for senior thesis on faculty approved student outline plan. Analytic journal required. *Prerequisites: Senior standing, WOST 4400, WOST 4500, WOST 4600, and WOST 4700 Co-requisites: WOST 4910.*

WOST 4900 - Independent Study

Units: 1-4

May be repeated for credit with consent of instructor, for a maximum of 12 units.

WOST 4910 - Action Research Seminar II

Units: 4

Second quarter of two-quarter seminar for senior thesis, an applied research project synthesizing coursework and two-quarters of fieldwork, includes project's significance, methodology, detailed documentation, relevant conclusions or recommendations. *Prerequisites: Senior standing, WOST 4400, WOST 4500, WOST 4600, and WOST 4700; Co-requisite: WOST 4800.*

Other Courses

ECON 3001 - Micro-Economic Theory II

Units: 4

Market structure, externalities and public goods, game theory, information economics. *Prerequisites: ECON 3000.*

LAST 3260 - Latin American Women and Globalization

Units: 4

Interdisciplinary examination of the effects of global capitalism on Latin American women. Focus on migration patterns, border economies, "maquiladora" factories, femicide, sex trade, neo-liberal economic policies, and autonomous women's organizations.

LAST 3999 - Issues in LAST

Units: 4

Course Number and Description Key

Course Numbering Key

The numbering of courses is intended to describe the level at which they are offered. Any student, however, may enroll for any course if he or she has completed the listed prerequisites, except for certain graduate courses.

Course Numbering Key

Course Number	Description
0800-0999	Remedial courses (not for baccalaureate degree credit)
1000-1999	Freshman level
2000-2999	Sophomore level
3000-3999	Junior level
4000-4999	Senior level
5000-5999	Post baccalaureate and professional level
6000-6999	Graduate level
7000-7699	Upper division level continuing education ¹
7700-7999	Graduate level continuing education ¹
8000-8999	Doctoral level

Course Units

() - Unit credits appear in parentheses following title of course

Class Hours per Week

The number of class hours a course meets per week equals the number of units listed for the course, unless otherwise indicated in the course description. (A "class hour" is 50 minutes.) Supervision courses (e.g., independent study, project, thesis) have no prescribed correspondence between class hours per week and units.

Footnote

1. See quarterly schedule or website (www.ce.csueastbay.edu) of Continuing and International Education for classes offered each quarter.

University at a Glance

The San Francisco East Bay Area's Regional University

California State University, East Bay is a comprehensive four-year institution that enrolls more than 13,000 students and offers undergraduate and graduate programs in a wide range of disciplines. Cal State East Bay's spacious 342-acre Hayward campus, situated in the rolling hills above San Francisco Bay, offers students and visitors panoramic views of the bay and bridges, as well as the vibrant cities and open space that surround the campus. With its wide expanses of lawns, tree-lined walkways, fountains, and beds of native California plants, the campus is one of the most beautiful in the CSU system. The University is recognized as a "Best in the West" college and a Best Business School by the Princeton Review and as a "top-tier" masters-granting university by U.S. News & World Report in its "America's Best Colleges" guide.

University Mission, Shared Strategic Commitments, and Institutional Learning Outcomes

Mission

Cal State East Bay welcomes and supports a diverse student body with academically rich, culturally relevant, learning experiences that prepare students to apply their education to meaningful lifework, and to be socially responsible contributors to society. Through its educational programs and activities the University strives to meet the educational needs and to contribute to the vitality of the East Bay, the state, the nation, and global communities.

Shared Strategic Commitments

Cal State East Bay takes pride in its eight Shared Strategic Commitments, which express the university's values and aspirations:

1. Reinforce academic quality through open-minded inquiry, innovative teaching, engaged learning, and distinguished scholarship
2. Enhance our inclusive campus, responding to the backgrounds and interests of our diverse community and promoting their academic, professional and personal development
3. Serve students first, by expanding access and enhancing each student's educational experience and prospects for success as a graduate and life-long learner
4. Foster a vibrant community through enriched student services and student life that support student engagement and learning
5. Contribute to a sustainable planet through our academic programs, university operations, and individual behavior
6. Continuously improve our efficiency, transparency, and accountability while practicing mutual respect, responsiveness, and collaboration across the University
7. Support the civic, cultural, and economic life of all communities in the regions we serve through partnerships that promote education and social responsibility
8. Demonstrate our continuing record of leadership and innovation in higher education, focused on 21st century skills, including science, technology, engineering, and mathematics (STEM)

Institutional Learning Outcomes

Using competencies developed through general education, their scholarly disciplines and co-curricular activities, graduates of CSUEB will be able to achieve the following outcomes:

- *Thinking and Reasoning*
 - Think critically and creatively and apply analytical and quantitative reasoning to address complex challenges and everyday problems.
- *Communication*
 - Communicate ideas, perspectives, and values clearly and persuasively while listening openly to others.
- *Diversity*
 - Apply knowledge of diversity and multicultural competencies to promote equity and social justice in our communities.
- *Collaboration*
 - Work collaboratively and respectfully as members and leaders of diverse teams and communities.
- *Sustainability*
 - Act responsibly and sustainably at local, national, and global levels.
- *Specialized Education*
 - Demonstrate expertise and integration of ideas, methods, theory and practice in a specialized discipline of study.

Assessment for Continuous Improvement

Cal State East Bay is committed to continuous improvement. Students, faculty and staff are asked to participate in learning assessments at the course, program, and university levels. The information used for assessment includes individual student work (assignments, essays, exams, projects, etc.), in addition to surveys and other indirect methods.

In order to assess the overall educational effectiveness of programs and the university, student work at Cal State East Bay is used on an aggregated basis to provide information for program improvement, as well as to demonstrate accountability to various stakeholders, including our students, the general public, and our accrediting agencies.

Students at Cal State East Bay should expect that their academic work may be used for assessment purposes.

Quarter System

Cal State East Bay operates on the quarter system. Each quarter (fall, winter, spring, summer) is approximately 11 weeks in length (10 weeks of instruction, plus 1 week of final exams). Enrollment in a quarter after admission to the university constitutes matriculation, including enrollment in all Special Session courses. (Special Session courses are groups of Continuing Education courses which have been approved to confer residence credit, with the exception of Open University courses.) Enrollment in Open University courses, as well as in Continuing Education Division courses, does not constitute matriculation.

One (1) semester unit is equivalent to one and one-half (1 1/2) quarter units of credit. One (1) quarter unit is equivalent to two-thirds (2/3) of a semester unit.

Accreditation

Cal State East Bay is accredited by the Western Association of Schools and Colleges Senior College and University Commission (WSCUC), 985 Atlantic Avenue, Suite 100, Alameda, CA 94501; phone: (510) 748-9001. The Commission is an institutional accrediting agency recognized by the U.S. Department of Education and is periodically reviewed by the Council for Higher Education Accreditation (CHEA).

- The B.A. and M.A. in Music are accredited by the National Association of Schools of Music.
- The master's education program in Speech-Language Pathology is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association, 2200 Research Boulevard #310, Rockville, Maryland 20850, 800-498-2071 or 301-296-5700.
- The undergraduate and graduate programs in the College of Business and Economics are accredited by the Association to Advance Collegiate Schools of Business (AACSB International).
- All of the university's programs for teaching and services credentials are approved by the California State Commission for Teacher Credentialing.
- The professional preparation programs of the College of Education are accredited by the National Council for Accreditation of Teacher Education.
- The School Psychology credential program has received full approval from the National Association of School Psychologists.
- The B.S. in Chemistry is approved by the American Chemical Society.
- The B.S. in Nursing is accredited by the Commission on Collegiate Nursing Education, One Dupont Circle, NW, Suite 530, Washington, DC 20036, (202) 887-6791 and the California State Board of Registered Nursing.
- The B.S. in Industrial Engineering is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>.
- The Master of Social Work is accredited by the Council on Social Work Education.
- The Continuing Education certificate program in Paralegal Studies is approved by the American Bar Association (ABA).
- The Continuing Education certificate program in Chemical Dependency is accredited by the California Association of Alcoholism and Drug Abuse Counselors (CAADAC).
- The Continuing Education certificate program in Human Resource Management is approved by the Human Resource Certification Institute (HRCI) for recertification hours.
- The Continuing Education certificate program in Project Management is approved by the Project Management Institute (PMI).

University Extension Programs

Continuing Education

Continuing Education at Cal State East Bay features a broad spectrum of courses, certificate programs, and degree programs that complement the University's regular curriculum, and meet the academic, professional, creative and lifelong learning goals of its diverse community.

CE designs courses to fulfill the needs of current job market trends, enhance professional development, and promote personal enrichment. Offering more than 40 certificate and degree programs in a variety of industries and fields, CE allows you to explore career options and pursue opportunities for advancement.

You may take one or more individual courses, enroll in a certificate program, or attend a seminar or conference. In some cases, academic credit is awarded; while in others, Continuing Education Units (CEUs) are available. In programs designed specifically for personal enrichment, no academic credit is awarded.

American Language Program

The university's American Language Program provides instruction for international students in academic English and introduces them to American culture. Each year, students from more than 25 countries enroll in the program. After graduating from the American Language Program, international students often enroll as matriculated students in the university.

Open University Concurrent Enrollment

The "Open University" program allows individuals to enroll in regular university classes without being formally admitted to the university. Regularly enrolled resident or non-resident students are not eligible to take Open University courses.

Open University students will be granted "Open University" extension credit for coursework. There are limits on the number of Open University extension units that may be applied toward university degrees. Up to 36 units may be applied towards a baccalaureate degree and up to 13 units for a master's degree.

Restrictions

Registration in most courses or programs sponsored by University Extension does not require formal admission to the university. For some programs, however, students may be required to meet certain requirements prior to being eligible to register. Only registration in Continuing Education Special Session classes provides "continuing student" status to admitted, matriculated students.

General Information

Information on courses, programs, and enrollment procedures is available through University Extension's quarterly bulletin, on the university website (www.ce.csueastbay.edu), by phone (510-885-3605), and by e-mail (ce@csueastbay.edu).

Concord Campus

The Concord Campus is a branch campus of Cal State East Bay located in Concord, and near Clayton, Walnut Creek, Pleasant Hill, Pittsburg and Antioch in beautiful Contra Costa County. The 386-acre campus includes over 300 acres of open space, community sports fields and views of Mt. Diablo and the Sacramento Delta, and is one of the largest branch campuses within the CSU system. Located at 4700 Ygnacio Valley Road, the campus is uniquely positioned to serve the educational needs of county residents. Established in 1981, the Concord Campus was the first CSU branch campus with a permanent location, and has provided quality education and services for more than two decades. Many residents have benefited from Cal State East Bay's educational presence and have enjoyed the small class size and intimate educational experience that the Concord Campus provides.

Degree Programs

Functioning as an upper-division and post baccalaureate campus in a thriving, suburban region, the Concord Campus offers varied curriculum taught by Cal State East Bay faculty and provides quality educational programs while making use of modern educational technologies to deliver state-of-the-art programs. In Fall 2008, the Concord Campus began providing lower-division courses for Pre-nursing students only.

Academic degree and credential programs currently offered at the Concord Campus are:

Undergraduate Fields of Study:

- Business Administration, B.S.
- Liberal Studies, B.A.
- Nursing, B.S. (Pre-Licensure Program)
 - Pre-Nursing/Pre-Health Sciences/Pre-Psychology preparation program for first time freshmen.
- Psychology, B.A.
- Sociology, B.A.

Some courses within the following majors are available at the Concord Campus. Degree completion for these majors may require students to complete coursework online or at the Hayward Campus:

- Criminal Justice
- Health Sciences
- Human Development
- History
- English

Certificates

- Multiple Subject
- Single Subject
- Paralegal Program Certificate
- Pre-Professional Health Academic Program

Application and/or registration through either the Hayward or Concord Campus qualifies a student to enroll in courses at both sites. Academic expectations and standards, as well as university policies, are the same at both locations.

Services and Facilities

The Concord Campus promotes student success through a variety of services. These include academic advising on general education (GE) and graduation requirements, as well as administrative and instructional support services. Students are referred to their departments for major advising. Instructional support services include advanced computer laboratories, modern smart

classrooms, a branch of the university's library, and a free shuttle service between the campus and the Concord BART station. There is also an on-site café/bookstore and student lounge.

Facilities

Outstanding instructional facilities include over 150 classrooms and teaching laboratories and over 200 specialized instruction rooms. Discipline-specific computer labs and general access labs with PCs and Apple computers are available for student use. The University Library, with its rich collections and online catalog, features individual and group study areas, as well as an innovative Learning Commons offering expert information technology support, access to extensive information resources, library reference services, and information literacy instruction.

The University Union, a popular student gathering place, includes food services, lounges, and meeting rooms. It also offers specialized services such as a credit union and an automatic teller machine. A major renovation of the University Union includes new retail food outlets, and space for growing student social and academic activities. The Student Recreation and Wellness Center houses a gymnasium, an elevated running track, two fitness centers and two multi-purpose exercise studios, locker rooms, and associated support space to promote nutrition, health and wellness.

Other campus facilities include a 500-seat theater, a television studio, a bookstore, a student health center and a 100,000 square foot student services and administration building. Pioneer Heights, the university's on-campus student apartment complex, offers housing for more than 1,300 residents, as well as a full service Dining Commons.

Cal State East Bay's Concord Campus, in central Contra Costa County, offers upper division and graduate instruction. Blending the natural beauty of its foothill setting with attractive facilities, small classes, and a personalized approach to teaching and learning, the Concord Campus serves more than 1,500 students. Classes are conducted in 22 classrooms and six teaching laboratories, including a 125-seat auditorium and a spacious art studio.

Further demonstrating the University's regional commitment, Cal State East Bay's Oakland Professional Development Center specializes in programs for working adults and offers professional development and certificate courses.

Cal State East Bay is also part of a university consortium that operates the Moss Landing Marine Laboratories in Monterey Bay. In addition, the University runs a San Francisco Bay shore lab with marine and freshwater craft operating in the bay and Sacramento River delta.

Location

- **San Francisco Bay**--campus overlooks the Bay and region from the East Bay hills
- **Pacific Coast**--45 minutes west
- **San Francisco, Berkeley, Oakland, Walnut Creek, and Concord**--30 to 45 minutes northeast and northwest via BART (Bay Area Rapid Transit) trains and freeways
- **Lake Tahoe and Yosemite Valley**--four hours northeast and east
- **Napa and Sonoma Valleys**--one hour north
- **Sacramento, the state capital**--one and one-half hours northeast
- **Santa Cruz beaches and Monterey Peninsula**--two hours south
- **San Jose and the Silicon Valley**--30 to 45 minutes south via freeways

Recreation

The Hayward campus recreational facilities include a 20,000 square foot main gymnasium, a dance studio, swimming pools, racquetball/tennis/volleyball courts, several playing fields and a par course. The 53,000 square foot Recreation and Wellness center, funded by student fees, opened in 2010, with a multi-court gym for basketball, volleyball, or badminton; an elevated running track; two fitness centers with free weights and machines; multipurpose fitness and activity rooms for aerobics, martial arts and dancing; locker rooms; and a juice bar in the lobby.

In addition to its own facilities, activities, and intramural sports, Cal State East Bay's campuses are close to San Francisco and other Bay Area cities that provide unique cultural opportunities including museums, libraries, art galleries, aquariums, planetariums, theater, sports events, and concerts.

Hiking trails are near both campuses. The extensive Garin and Dry Creek-Pioneer East Bay Regional Parks are located immediately southeast of the Hayward campus. Beautiful Mt. Diablo and the Lime Ridge open space are adjacent to the Concord campus. In addition, proximity to the Pacific Ocean and Sierra Nevada mountains offers recreational diversion as well as excellent laboratories for educational studies.

Transportation

Commuting is convenient with three BART (Bay Area Rapid Transit) train stations near the Hayward Hills campus and two BART stations serving the Concord campus. The University offers shuttle service to and from BART at both campuses for faculty, staff, and students. On-campus parking is also available for a daily or quarterly fee.

Hayward Campus

The Hayward and South Hayward stations are within three miles of the Hayward campus, and the Castro Valley station is four miles away. The University operates a shuttle bus between the Hayward BART station and the Hayward campus, which students may ride for free (with a current Bay Card). The AC Transit bus # 60 also runs between campus and the Hayward BART station. Adult bus fare is \$2.10 and monthly passes are available. The university is a short distance from Interstate 880 (via Santa Clara Street and Harder Road) and Interstate 580 (via Foothill and Mission Boulevards).

Concord Campus

A free student shuttle operates between the campus and the Concord BART station, both days and evenings, Mondays through Thursdays.

Art Galleries

The Hayward Hills campus enjoys two exhibition spaces (the University Art Gallery and the Student Gallery) which make it possible to mount shows of varying size and significance.

The University Art Gallery is 2820 square feet of exhibition space. Located in AE 106, the Gallery has one person shows, group shows and student shows in a variety of media. An adjoining courtyard is available to display outdoor sculpture. Admission to the University Art Gallery is free. The student gallery, located in AE 274, is a more intimate space. Throughout the year, students present their works for short exhibitions. The days and hours of these shows vary and are also admission free.

Bookstore

The Pioneer Bookstore's mission is to support the educational endeavor of the University by offering access to course materials for classes, as well as merchandise and services for the convenience of the campus community. The Hayward campus store is located between the Library and the University Union. The Concord campus store is located in the Campus Union.

In addition to your required course materials, your bookstore offers: CSUEB logo clothing and gifts, electronics, nursing supplies

and scrubs, lab supplies, educationally-discounted computer software and hardware, computer supplies, school and office supplies, testing materials and study guides, general books, art supplies, Peet's coffee, fresh sandwiches and salads, microwave meals and other snacks. The Hayward store also has a full-service Bank of America ATM.

All course materials and selected merchandise and services can be ordered online for delivery to your address at a fee, or for campus pickup at no additional charge. The website also posts current hours and general information. Hours and general information are also available at 510-885-3507.

Business and Economics Special Facilities

The College of Business and Economics has Student Success and Service Centers in the Valley Business & Technology Center, VBT 129 (510-885-3323) for undergraduate students and VBT 132 (510-885-2419) for graduate students, providing academic guidance for Business and Economics students. In addition, there are numerous student study commons located throughout the building.

The Acosta Gallery is used for hosting special events and when not in use serves as a gathering place for students.

Technology, Communication, and Media Support

The Division of Information Technology Services, ITS, <http://www.csueastbay.edu/its/> strives to support and enrich the university experience for students, faculty and staff—an experience that is increasingly technology enabled and network based. ITS teams develop, operate and maintain the University's shared information technology infrastructures, major administrative and academic information systems, baseline instructional and information technologies, and the requisite technical support services. ITS provides support services to the University community via the following two primary groups:

Academic Technology and Support Services (ATSS)

Academic Technology and Support Services is responsible for the support of academic technologies delivered throughout campus and online. Components of this organization are also engaged in the research of new and emerging technologies as they pertain to the instructional mission of the University. ATSS is comprised of the following:

Media and Academic Technology Services (MATS)

Media and Academic Technology Services (MATS) Located in the Lower Mall across from the Library in room LI 2800, MATS provides support for faculty presentation needs and facilitates their use of instructional technology and instructional media. Some of the services provided by MATS are multimedia production, consultation with individual faculty on computer applications and presentation equipment, coordination of campus-wide technology funding initiatives, online education including the campus learning management system (Blackboard), Internet delivered instruction, streaming media technologies, and instructionally related video editing and production.

Classroom Technology Services (CTS)

Located in LI 1099, CTS provides support for technology resources in the University's classrooms. Services include maintaining smart classrooms, ensuring the optimal operation of presentation and computer equipment in these rooms, as well as providing technology delivery services such as the delivery of computer carts to non-technology equipped classrooms.

User Support Services (USS)

The USS department of the Division of Information Technology Services provides desktop support and consulting to the academic and administrative faculty and staff. Services include delivery, configuration, troubleshooting, and removal of computers; distributing and installing licensed software applications; consulting with faculty and staff members to assist with the operation of their computers; and providing services to secure the University's computers and to protect computers from security

threats. USS is responsible for the purchase, control, and deployment of all ITS-owned assets including software.

USS also manages a central Service Desk, which is available to all members of the campus community who have questions regarding computing software, hardware and network communications. The Service Desk can be reached by calling 885-H-E-L-P (4357), e-mailing servicedesk@csueastbay.edu or online at <http://servicedesk.csueastbay.edu>.

In addition, ITS provides training for staff and administrators in selected university-specific enterprise computer applications. See the training website for more information at <http://www20.csueastbay.edu/its/departments/cis/training-help/>.

Language Laboratory

Currently, the Department of Modern Languages and Literatures does not have a language laboratory; however, the University Library has audio and video tape collections of instructional programs in the languages currently taught, including American Sign Language. This temporary facility is located at Media, Resources and Reserves in the library.

Library

The University Library plays an important role on campus, constantly transforming its services to support the teaching and learning needs of students and faculty in an ever-changing digital environment. The University Library continues to house locally owned printed materials and provides access to extensive electronic information resources online. The library instruction program teaches students how to locate and use the right information at the right time. The University Library also provides facilities where students use the latest technology tools in the Learning Commons, collaborate with their peers in group study rooms, or study in quiet areas.

Information Resources

The University Library offers extensive collections, both in print and online, to support academic programs and faculty research. The library holds over 900,000 printed items, including books, journals, scores, maps, and U.S. federal and California state government publications. The library currently maintains over 300 print subscriptions to journals, some of which offer free online access to electronic versions. In addition, it has over 850,000 microform items, and over 30,000 media resources. The library subscribes to many electronic databases and provides access to approximately 101,000 journals and over 120,000 electronic books. The University Library supports and maintains both special collections and archives. Special Collections houses rare and antiquarian books; fine examples of book art; and manuscript collections, such as the Jensen Family papers, which provide rich primary sources on the history of the Hayward area. The University Archives contain the official records of the history of the university, as well as materials pertinent to the history of Southern Alameda County. The library online catalog at <http://csueb.iii.com/search/X> can be searched by author, title, subject, call number, and keywords. Visit the library website at <http://library.csueastbay.edu> to discover information resources both within and beyond the walls of the library.

Instructional Services

The library offers LIBY 1210 (Introduction to Information Literacy), a course which satisfies the General Education Information Literacy requirement. The library also offers LIBY 1551 (Information Skills for the Electronic Age). (See the Library chapter in the undergraduate section of this catalog for course descriptions and further information.) In addition to credit courses, the library offers course-specific instruction and workshops at faculty request to complement specific projects and papers assigned in class.

Reference Services

The library offers reference assistance in person at the Reference Desk, over the telephone, through electronic chat reference, and via e-mail. Librarians are also available by appointment and during scheduled office hours for individual consultation regarding

library research. For every department on campus, subject specialist librarians have created a LibGuide. For a list of the librarians and their subject areas, see the see <http://csueastbay.libguides.com/browse.php?o=a>.

Circulation and Borrowing Services

Most library printed materials are available for check-out. For details about our circulation policies, ask at the Circulation Desk or contact us at (510) 885-3612, orcircservices@csueastbay.edu. The library participates in LINK+ (at <http://csul.iii.com>), a resource sharing service that enables faculty, staff, and students to place their own requests to borrow books that are not available at Cal State East Bay. Books are borrowed from public university libraries throughout the state. Interlibrary Loan staff help you borrow books and journal articles not readily available at the University Library or through LINK+. You can make interlibrary loan requests through the library web site at <https://csueastbay.illiad.oclc.org/illiad/logon.html>.

Media Resources and Reserves

From the Upper Mall Service desk, the library provides access to media resources such as DVDs, compact disks, videos, and other formats. Viewing and listening equipment is available. Reserve materials that faculty members have set aside for class use are available at this desk, or through Blackboard if materials are available in digital format.

The Library as Place

The library is your intellectual center to study, engage in research, and share knowledge and insight with others. Various spaces within the library are designed to facilitate group and individual work. The library offers the following: (1) *The Learning Commons*, a state-of-the-art facility offering the largest group of computers on campus, coupled with access to the collections, services, and support offered by the library; (2) *Adaptive Technologies* which include several workstations on wheelchair accessible tables, and special speech and text magnification software; (3) *Photocopy Services*, self-service machines available throughout the library (machines accept currency, coins, and copy cards); (4) *Networked Printing Services*, computers in the Learning Commons and wireless laptops allow you to print from MS Office suite (Word, Excel, PowerPoint, Access), the Internet, and library databases (5) *Group Study Rooms* on the Upper Mall can be reserved online with D!Bs (at <http://csueastbay.evanced.info/dibs>) and facilitate work in small groups and the intellectual exchange of ideas through discussion; (6) *Student Center for Academic Achievement* (SCAA) on the Upper Mall offers tutoring primarily in English and Mathematics.

Concord Campus Library

The branch campus library in Concord is a full-service library, providing reference and instructional assistance, electronic services, and circulation services. The Concord Campus Library provides access to all the resources at the main library through onsite and networked resources. Print materials from the main library can be paged for pickup in Concord.

Marine Laboratories

Instruction in marine biology, geology, oceanography, and other marine sciences is offered at the Moss Landing Marine Laboratories (www.mlml.calstate.edu) in conjunction with a consortium of five other California State University campuses. Full-time course offerings are available for resident credit and the facilities are used to supplement courses taught on the Hayward Hills campus. The laboratories are located 82 miles south of Hayward on Monterey Bay, and some classes are taught in Salinas. See the Marine Sciences chapters in this catalog for further details and for courses offered at Moss Landing, as well as information on the M.S. program in Marine Science.

Museum of Anthropology

The Clarence E. Smith Museum of Anthropology was established in 1974 and opened its exhibition gallery in 1979. Chartered as a teaching museum for the instruction of museology in an anthropological context, the Museum is named in honor of the late Professor Clarence Smith of the Department of Anthropology. Professor Smith recognized the advantage of demonstrating tangibly, in art and artifact, both human diversity and the range of human achievement throughout the world. Efforts are made to represent both traditional cultural forms and their contemporary expressions and influences. In the forefront of the Museum's repertory are exhibits designed to illustrate all aspects of human culture from around the world, features of culture change, and technological as well as biological evolution.

The exhibition galleries of the Museum are located in the southeast corner of the fourth floor of Meiklejohn Hall on the Hayward Hills campus. They are open to the public, Monday through Friday, and by appointment; admission is free. Access to the collections is limited to qualified professionals and students whose scholarly research requires direct examination of the Museum's holdings. Consult with the Museum's collection manager for a current list of artifacts held. The staff and director's office is located on the first floor (1017) of Meiklejohn Hall. Consultations are given by appointment. For information on exhibits and appointments, call the Museum at (510) 885-3104 or (510) 885-3168, Monday through Friday, 8:00 a.m. to 5:00 p.m.

Parking Facilities

Campus parking facilities are available to students displaying valid parking permits. Quarterly permits may be purchased by mail during the registration process, on-campus at the Cashier's Office, 1st Floor, Student Services and Administration Building, in the Pioneer Bookstore, and in the Concord Campus Academic Services lobby, as well as online via the Bookstore. Several parking lots contain parking permit dispensers from which a "Day Permit" or "Hourly Permit" may be purchased. In addition, there are several metered spaces available on the Hayward campus. See campus maps for locations of parking facilities.

Science Facilities

The College of Science is housed in a 201,000-square-foot science building which includes many specialized teaching laboratories, general purpose personal computers, and specialized computing facilities.

The Departments of Biological Sciences, Chemistry and Biochemistry, Engineering, Earth and Environmental Sciences, Mathematics and Computer Science, Nursing and Health Sciences, Physics, and Psychology each maintain a number of well-equipped laboratories for undergraduate instruction. Laboratory classes are limited to 24, 20, 16, or 12 students, depending on the discipline.

In addition to the normal complement of laboratory equipment, students in the College of Science have access to three modern teaching and research core facilities:

BioCore: *Support for cellular and molecular biology teaching and research*

- **Equipment:**
Existing: DNA sequencer, real time PCR machine, flow cytometer, fluorescent microscope, HPLC, trace DNA lab, cell culture facility;
Future: confocal microscope, microarray reader, FACS for cell type analysis, robotics
- **Supported Activities:** Cell culture and cell sorting, DNA sequencing and typing, gene expression studies, forensic science and ancient DNA work

ChemCore: *Support for qualitative, quantitative and structural analyses of chemicals and biomolecules*

- **Equipment:**
Existing: 500MHz multi-nuclear FT-NMR spectrometer, gas chromatographic/mass spectrometer, high performance liquid chromatography apparatus with fluorescence detection, FT-IR and UV/visible/infrared (diode array) spectrophotometers, spectrofluorometer and atomic absorption spectrometer.
Future: microwave synthesizer, fluorescence spectrophotometer, liquid chromatography/mass spectrophotometer

- **Supported Activities:** qualitative and quantitative analyses of inorganic and organic molecules including nucleic acids and proteins, structural analyses of organic molecules, analyses of environmental samples including pesticides and heavy metals

CompCore: *Support for high capacity computing and visualization*

- **Equipment:** 40-core cluster system; large 9-panel display wall; cluster-driven immersive projected display; workstations with modern graphics cards

Supported Activities: Faculty and student projects include mathematics visualization, immersive display for panoramic photographs, statistics simulations, surround audio research, graphics rendering algorithms for GPUs

Biology Faculty members maintain individual research labs set up with equipment for the research and mentoring of students in the various specialized, research programs. Basic research and teaching in cell and molecular biology takes place in a shared facility, BioCore, which is a 1400 square foot facility set up with major pieces of equipment that facilitate experiments involving cell culture and flow cytometry, DNA sequencing and typing, gene expression studies, forensic science and ancient DNA work. Major instrumentation includes DNA sequencers (CE and next generation), Q-PCR machines, two flow cytometers, fluorescent microscopes, pulse field gel units, pippenpreps, a Bioanalyzer, a trace DNA clean room and a cell culture facility with hoods and incubators. An imaging facility is also maintained in BioCore which includes a wide-field fluorescent microscope with digital camera, and a confocal microscope with 4 lasers lines of excitation and high numerical aperture lenses.

The Department of Chemistry and Biochemistry houses the ChemCore facility and maintains laboratory instruments and equipment and instruments typical of comparable institutions. The Nuclear Magnetic Resonance (NMR) spectrometer is a 500 MHz instrument that allows structure elucidation of small molecules and biological compounds. Other instruments include several FT-IR spectrophotometers, two gradient capable high performance liquid chromatographs (HPLC), an atomic absorption spectrophotometer (flame, graphite furnace and cold vapor), a fluorescence spectrometer and a capillary gas chromatograph/mass spectrometer (GC/MS). Other specialized equipment includes several gas chromatographs, a molecular imaging system, thermal cyclers, high speed centrifuges, a table top ultracentrifuge, a 96 well plate reader with fluorescence and UV/Vis detection, a plant growth chamber and other incubators, Nanodrop spectrophotometers and Vernier graphing calculators with probes for pH, temperature and voltage measurements. A molecular modeling facility equipped with 24 computers is also available for instruction and research.

The Department of Engineering maintains five laboratories:

- **Sustainable Construction Materials Lab:**
- The newest lab in Engineering, this humidity controlled curing room, houses a cyliner testing machine, a concrete grinder, sieve analysis shaker machines, soils ovens and a concrete mixer.
- **Computer Integrated Manufacturing/Quality Testing:**
Serves as a teaching lab; designed and developed to support various engineering courses with equipment ranging from table-top machine tools, robots, coordinate measuring machine and computer workstations to control this equipment.
- **Computer Laboratory:**
Houses 50 computer workstations equipped with the latest versions of IE and manufacturing software; open to engineering students to work on projects and homework.
- **Human Performance Laboratory:**
Equipped with various types of work measurement hardware and software, a treadmill and a work simulator machine. It also houses two Segway vehicles to study ergonomic design concepts. This laboratory is equipped with multi-media presentation equipment.
- **Material Testing Laboratory:**
Houses an MTS machine, a torsion tester, an engineering microscope, and other measurement equipment. The lab houses a plastics processing equipment that is capable of demonstrating various plastics processes such as injection molding, blow molding and extrusion.

The Department of Earth and Environmental Sciences is equipped with modern research and field instruments including a laser liquid-water isotope analyzer, vibrating tube densimeters, laser diffraction particle-size analyzer, cathodoluminescence microscope; X-ray diffractometer; petrographic and ore microscopes; ground penetrating radar; 24-channel seismographic system, and a proton magnetometer.

Field equipment includes a portable kitchen and other field supplies and a small power boat with sampling equipment for shallow water studies. Laboratories are equipped for sediment analysis, thin-section preparation, and photomicrography. The department also has large collections of minerals, rocks, fossils, and maps.

Computer science and math students at Cal State East Bay have access to some of the most modern and powerful computer equipment available. The campus provides a network backbone, including connection to the Internet and hundreds of personal computers. The department also has equipment of its own, including a network of Unix workstations and classrooms equipped for computerized demonstrations. Several computer labs on campus offer remote access and assistance with problems. CompCore is an advanced computing facility the department shares with the College of Science. Student and faculty projects can use its 40-core cluster system, large 9-panel display wall, immersive projected display system, and several workstations with modern graphics cards.

In the Nursing Skills Lab, nursing students practice in a simulated health care setting under the guidance of the Skills Lab Coordinator. This prepares them to move into local hospitals and community health agencies for their clinical patient/client experience.

Students in Physics have access to world-class experimental facilities for undergraduate research and research training. One research laboratory is dedicated to thin film material science; i.e. organic polymer photovoltaics and metamaterials. Facilities include a thermal evaporator for preparation and characterization tools for electronic transport and THz spectroscopy. Another research laboratory, funded by grants from the National Science Foundation, is dedicated to tests of fundamental physical laws using atomic spectroscopy with state-of-the-art laser systems, magnetic shields, magnetic and electric field controls, and data acquisition systems. Research training facilities include an atom trapping and cooling laboratory, an electron-spin and nuclear magnetic resonance system, solar spectroscopy setup, and high-resolution grating spectrometers.

The Department of Psychology maintains laboratories and equipment for conducting student research in development, personality, social psychology, industrial psychology, physiological psychology, perception, conditioning, and cognition. The Psychology department also maintains a computer lab for use by students and faculty.

A computer lab, funded originally by the National Science Foundation, is equipped primarily for instruction of **Statistics** majors and minors, but is available for use by students in other areas as well. The laboratory has 36 personal computers networked to servers with professional statistical software and data sets. Both hardware and software are state-of-the-art. Applied and theoretical statistics classes use the lab for demonstrations of statistical computing and for class projects in which students learn practical data analytic skills that aid them in the transition from school to work.

Some rooms in the science building have also been set aside to function as computer centers. The Science Computer Lab is a 50 station lab with all the software needed by science students to do their homework. The flex classroom, Science South 149, is wired for students to bring laptops to use in the classroom.

University Union

As a program of the Associated Students, Inc., the University Union is the community center for Cal State East Bay providing services, facilities, and programs to meet the various social, recreational, and cultural needs of the students, faculty, staff, and community.

The University Union has a great deal to offer. Housed within the Union buildings are the Associated Students Administrative Offices, Student Government Offices, information and reservation center, Student Life and Leadership Programs office, The Diversity Center, an ATM machine, food services, recreational facilities, game rooms, and lounge areas. With conveniently located televisions, the Union is the ideal location for catching up on current events, watching a major sporting event, or enjoying music videos in a relaxing atmosphere.

Meeting and multipurpose rooms are also available for use by student organizations, academic and administrative departments, CSU East Bay affiliated groups, and off campus groups. The University Union provides an ideal setting for club and organization meetings, lectures, receptions, banquets, and special events.

As the "living room" of the campus, the University Union provides the Cal State East Bay campus with a community center for students, faculty, staff and campus guests.

We look forward to serving you in the University Union!

Reservation Procedures

All groups may request to make reservations online at <http://www.asicsueb.com> or by completing a reservation request form that may be obtained at the reservations desk in the Union.

All evening events occurring outside normal operating hours must be approved in advance by ASI. No organization or department may reserve space on behalf of another group. Groups may not sell, sublease, or transfer their reservation to another group. In order to avoid operating and personnel charges, reservations must conclude at the scheduled close of the building.

All groups receive the following complimentary services at no charge:

- Room rental standard set-up
- One head table and one registration table
- Tables for food (no table skirt)

Organizations that have access to the University Union facilities include university-recognized student organizations, academic and administrative departments, Cal State East Bay-affiliated groups, and off-campus groups.

All recognized Cal State East Bay student organizations may make tentative reservations directly, with confirmation pending approval obtained through the Student Life and Leadership Programs Office. Academic/administrative/service departments can make reservations directly. The Union facilities shall not be used for regular academic classes. Deviation from this policy requires approval from the Executive Director of Associated Students, Inc.

Groups not directly affiliated with the university should make reservations directly with the University Union Reservations Office and will be required to pay all charges and fees associated with their planned event prior to the event.

Room Rental Fees

Rental fees will be levied according to the University Union room rental fee structure. If special services (i.e., technical support, special equipment) are requested, the University Union will levy the charge appropriate for the service requested. Set-up fees may be assessed for use of the University Union when the sponsor requires set-ups beyond those normally provided.

A-V Equipment

Audio-visual equipment is available upon request at the time of reservation. LCD projectors, screens, P.A. systems, and laptops are available.

Cancellations

The policy of notifying the University Union Reservations office of cancellations enables the Union to meet the growing demand for space. Organizations are encouraged to make reservations as early as possible. Groups that frequently violate the cancellation policy will not have the opportunity to continue reserving space. Appeals can be directed to the Executive Director of Associated Students, Inc.

Banners/Posters

Recognized Student Organizations, Associated Students, and university departments may place banners announcing events on one of four (4) designated banner spaces on the South balcony. Banner space is available for a maximum of one week on a first-come, first-served basis and must be reserved through the University Union Reservations Desk at 885-7245.

Title 5, California Administrative Code, Subchapter 5, Article 9, Sections 42350-42353 specifies certain restrictions on the posting and distribution of printed materials on campuses of the California State University. Campus Presidents and/or designees are granted authority for implementing and for issuing directives pertaining to such regulations. The policy for posting can be found at: Posting Policy.

Recreation and Wellness Center (RAW)

Co-managed by Associated Students' Recreation department (ASI Rec) and Student Health and Counseling Services (SHCS) Health Promotion department, the Recreation and Wellness Center (RAW) provides facilities, programs and services to support the CSUEB campus community in their pursuit and maintenance of a healthy and balanced lifestyle. RAW facilities include a two-court gymnasium, two-story fitness center, wellness resource center and lounge, relaxation room, locker rooms, equipment rental, a track and two group fitness studios. Designed to the L.E.A.D. (Leadership in Energy and Environmental Design) Gold certification standards, RAW's facility design was recognized with a Facility of Merit Award from Athletic Business in 2011.

RAW membership is open to all students, faculty, staff and alumni. Students that pay the UU Rec Fee as part of their tuition fees are eligible for a complimentary membership. Membership includes access to all the RAW facilities as well as a series of programs and services which include nutrition and fitness consultations (students only), fitness equipment orientations, day use lockers, bath and fitness towel service, and specialized sports and fitness equipment. Additional low-cost programs available include fitness classes and workshops, intramurals sports leagues and tournaments, equipment rental as well as massages.

RAW is managed and operated by CSUEB students. SHCS offers internships through the Peer Advocates for Wellness (PAW) program. ASI Rec employs over 100 students in various RAW facility and program operations.

For more information about the Recreation and Wellness Center including the programs and services offered by ASI Rec and SHCS, visit the RAW website at www.csueastbay.edu/raw. Information on ASI Rec can also be found at www.asicsueb.com.

University Administration

University Administration and Professional Staff

Office of the President

President, Leroy M. Morishita, Ed.D.

- Chief of Staff: Derek J. Aitken, J.D.
- Executive Assistant to the President: Colleen Heller
- Executive Assistant to the Chief of Staff: Andrea Lum
- Confidential Administrative Support Coordinator/Project Manager: Rebecca Olivera

Academic Affairs

Provost and Vice President, Academic Affairs, Interim: Carolyn Nelson

- Special Assistant to the Provost: Gina Traversa
- Director, Academic Affairs Budget and Communications: Audrey Katzman
- Director, Sustainability Initiatives: Jillian Buckholz
- Associate Provost: Linda S. Dobb
 - Director, Faculty Development: Jessica Weiss
 - Director, Center for Community Engagement: Mary D'Alleva
 - Director, Academic Advising and Career Education: Lawrence Bliss
 - Director, Online Campus: Roger Wen
 - Director, Institutional Research and Effectiveness: James Hershey
 - Team Leader, Institutional Research: David Garcia

Associate Vice President, Academic Programs and Graduate Studies, Interim: Donna Wiley

- Director, General Education, Interim: Nancy Thompson
 - Advisor/Coordinator, General Education Program: Linda Beebe
 - Manager, Peer Mentor Services: Valerie Machacek
- Director, University Honors Program: Bridget Ford
- Manager, Educational Effectiveness Research: Fanny PF Yeung
- Articulation Officer: Kyle Burch
- Academic Programs and Accreditation Specialist: Tamra Donnelly
- Catalog and Curriculum Analyst/Specialist: Sarah Aubert
- Instructional Design Specialist: Julie Stein
- Testing Specialist: Meena Sharma
- Presidential Appointee to the Grade Appeal and Academic Grievance Committee: Erica Wildy

Associate Vice President, University Extension: Brian Cook

- Director, Continuing Education Programs: Kate White
- Director, Special Sessions Programs: Balvinder Kumar
- Director, Marketing: Dan Bellone
- Executive Director, International Programs: Raymond P. Wallace
 - Director, Center for International Education: Kelly Moran

- Director, American Language Programs: Thomas Tyner
- Director, Concord Campus: Robert Phelps
 - Operations Coordinator: Cecilia Zefeldt

Associate Vice President, Research and Professional Development, Interim: Stephanie Couch

College Deans, University Library, Department Chairs, and Program Directors

Dean, College of Letters, Arts, and Social Sciences: Kathleen Rountree

- Special Assistant to the Dean: Rosalinda Romero
- Associate Dean: Rafael Hernandez
- Associate Dean: Dennis Chester
- Assistant to the Associate Deans: Elizabeth Graw
- Chair, Department of Anthropology, Geography and Environmental Studies: David Larson
- Chair, Department of Communicative Sciences and Disorders, Interim: Shubha Kashinath
- Chair, Department of Criminal Justice Administration: Dawna Komorosky
- Acting Chair, Department of English, Interim: Sarah Nielson
- Chair, Department of Ethnic Studies, Interim: Carlos Salmon
- Chair, Department of History: Linda Ivey
- Chair, Department of Human Development and Women's Studies: Keri O'Neal
- Chair, Department of Modern Languages and Literatures: Monique Manopoulos
- Chair, Department of Philosophy: Christopher Moreman
- Chair, Department of Political Science: Kim Geron
- Chair, Department of Public Affairs and Administration: Jay Umeh
- Chair, Department of Social Work: Evaon Wong Kim
- Chair, Department of Sociology and Social Services: Patricia Jennings
- Director, International Studies Program: Michael Lee
- Director, Liberal Studies Program, Interim: Jiansheng Guo
- Director, School of Arts and Media: Buddy James
 - Chair, Department of Art: Gwyan Rhabyt
 - Chair, Department of Communication: Mary Cardaras
 - Chair, Department of Music: John Eros
 - Chair, Department of Theatre and Dance: Thomas C. Hird
 - Director, Multimedia Graduate Program, Interim: Gwyan Rhabyt

Dean, College of Business and Economics: Jagdish Agrawal

- Human Resources Coordinator: Wanda Davenport
- Associate Dean: Xinjian Lu
- Director, Undergraduate Programs: Xinjian Lu
- Director, Graduate Programs: C. Joanna Lee
- Chair, Department of Accounting and Finance: Nancy Mangold
- Chair, Department of Economics: Jed DeVaro
- Chair, Department of Management: Zinovy Radovilsky
- Chair, Department of Marketing and Entrepreneurship: C. Joanna Lee

Dean, College of Education and Allied Studies, Interim: James Zarrillo

- Assistant to the Dean: June Laherran
- Associate Dean: Patricia Irvine

- Chair, Department of Educational Leadership: Peg Winkelman
- Chair, Department of Educational Psychology: John M. Davis
- Chair, Department of Kinesiology: Paul Carpenter
- Chair, Department of Hospitality, Recreation and Tourism: Christopher Chamberlain
- Chair, Department of Teacher Education, Interim: Eric Engdahl

Dean, College of Science: Michael K. K. Leung

- Administrative Assistant to the Dean: Mariza Sobejana
- Associate Dean, Interim: Jason Singley
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- Chair, Department of Chemistry and Biochemistry: Ann McPartland
- Chair, Department of Computer Science: Matt Johnson
- Chair, Department of Engineering: Saeid Motavalli
- Chair, Department of Earth and Environmental Sciences: Jean Moran
- Chair, Department of Mathematics: Julie Glass
- Chair, Department of Nursing and Health Sciences: Lynn Van Hofwegen
- Chair, Department of Physics: Erik Helgren
- Chair, Department of Psychology: David Fencsik
- Chair, Department of Statistics and Biostatistics: Eric Suess

Dean, University Libraries: John Wenzler

- Coordinator, Instructional Services: Thomas Bickley
- Coordinator, Research Services: Vacant
- Coordinator, Information Literacy Services: Diana Wakimoto
- Chair, Library Faculty: Liz Ginno
- Director, Student Center for Academic Achievement: Jen Nguyen

Academic Senate

Chair, Academic Senate: Michael Hedrick

- Academic Senate Coordinator: Sophie Rollins

Administration and Finance

Vice President, Administration and Finance, CFO, Interim: Debbie Chaw

- Associate Vice President, Facilities Development and Operations: Jim Zavagno
- Associate Vice President, Financial Services: Darrell Haydon
- Associate Vice President, Human Resources and Payroll Services: André Johnson
- Associate Vice President, Information Technology Services: Borre Ulrichsen
- Associate Vice President, Risk Management and Internal Control: Nyassa Love
- Assistant Vice President, Enrollment Management Systems: Glen Perry
- Chief, University Police Department: Sheryl Boykins
- Director, Leadership and Employee Enrichment Program: Corey Gin
- Assistant to the Vice President: Carmen Rusca

Information Technology Services

Associate Vice President & CIO: Borre Ulrichsen

- Information Security Officer (ISO): Matt Collins
- Director, Academic & User Support Services: Eric Neumann
- Director, Campus Information Services: Mercedes Alvarez-Arancedo
- Director, Data Warehouse: Liliana Chou
- Director, System Engineering & Support: Gene Lim
- Infrastructure Operations and Technical Security Officer: Thomas Dixon
- Director, Service Quality: Twinki Mistry
- Director, Application Management Services: David Corral
- Supervisor, Media & Academic Technology Services (MATS) Supervisor: Terry Smith
- Supervisor, Web Services: Dan Legate

Student Affairs

Vice President, Student Affairs: Julie Wong

- Associate Vice President, Campus Life: Martin Castillo
 - Director, Student Life and Leadership: Marguerite Hinrichs
 - Director, Campus Recreation and University Union Programs: Vacant
 - Executive Director, Associated Students Incorporated: Erik Pinlac
 - Manager, Parking and Transportation Services: Derrick Lobo
 - Associate Director, Residence Life: Kenrick Ali
- Associate Vice President, Student Support and Development: Andrea Wilson
 - Director, Accessibility Services: Katie Brown
 - Director, Student Conduct, Rights and Responsibilities: Rebekah Rhodes
 - Manager, Health and Wellness Services: Jennifer Luna
- Associate Vice President and Dean of Students, Student Equity and Success: Stan Hébert
 - Coordinator, GANAS Program: Melissa Cervantes
 - Director, EXCEL: Teresa Golebiewska
 - Director, EOP: Alison Richardson
 - Veteran Student Services: Cherie Randolph
 - Veteran Student Services: Deborah Hansana
 - Coordinator, Renaissance Scholars: Lael Adediji
 - Coordinator, Sankofa Scholars: Vacant
- Enrollment Services
 - University Registrar: Angela Schneider
 - Executive Director, Admissions: John Pliska
 - Executive Director, Financial Aid: Rhonda Johnson
 - Director, Prospective Student Services: Amanda Segura
- Director, Intercollegiate Athletics: Joan McDermott

University Advancement

Vice President, University Advancement: Tanya Hauck

- Associate Vice President, Development and Campaign Director, Interim: Don Scoble

- Executive Director, Advancement Services and Foundations: Debbie Chaw
- Executive Director, University Communications: Jeff Bliss
- Director, University Events: Richard Watters
- Executive Assistant to the Vice President, Interim: May Hernandez

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- Marvin A. Remmich, Vice Chair
- A. Lee Blich, Interim President
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- Brad Wells, Treasurer
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- Ray Garcia, Faculty Trustee
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- James L.J. Houpis
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- James Klescewski
- Kumar Malavalli
- Leroy M. Morishita, Ed.D.
- Patrick O'Brien
- Janet L. Owen
- Micky S. Randhawa
- Richard Sherratt
- James H. Songey
- Gary Wallace
- Allen Warren
- John Zamora (Student Trustee)

The California State University

The California State University

Welcome to the California State University (CSU) - the world's largest comprehensive higher education system in the nation with 23 unique campuses serving more than 450,000 students with 45,000 employees statewide. Each year, the university awards nearly 100,000 bachelor's, master's and doctoral degrees. CSU graduates now total more than three million strong, and are serving as leaders in the industries that drive California's economy, including business, agriculture, entertainment, engineering, teaching, hospitality and healthcare. Learn more at www.calstate.edu.

More than 50-year tradition of excellence

Since 1961, the CSU has provided an affordable, accessible, and high-quality education to nearly three million graduates around the state of California. While each campus is unique based on its curricular specialties, location and campus culture, every CSU is distinguished for the quality of its educational programs. All campuses are fully accredited, provide a high-quality broad liberal educational program and offer opportunities for students to engage in campus life through the Associated Students, Inc., clubs and service learning. Through leading-edge programs, superior teaching and extensive workforce training opportunities, CSU students graduate with the critical thinking skills, industry knowledge and hands-on experience necessary for employment and career advancement.

Facts

- CSU faculty attract more than \$580 million annually in research and education grants, and contracts by federal, state and regional agencies.
- Today, one of every 20 Americans with a college degree is a CSU graduate.
- 1 in every 10 employees in California is a CSU alumnus.
- The CSU awards 45 percent of the bachelor's degrees earned in California.
- More than half of all the nurses in the state earn their degrees from the CSU.
- The CSU awards 95 percent of the hospitality/tourism degrees in the state.
- Nearly half of all of the state's engineers earn their degrees from the CSU.
- The CSU is the leading provider of teacher preparation programs in the state.
- The CSU offers more than 115 fully online/hybrid degree programs.
- The CSU offers 3,250 online courses to provide more educational options to students who may prefer an online format to a traditional classroom setting.
- The CSU's growing online concurrent enrollment program gives students the ability to enroll in courses offered by other campuses in the CSU system.
- The CSU serves more than 5,000 individuals annually through professional development certificate programs in educational health services, business and technology, leisure and hospitality, manufacturing, international trade, and many other industries.
- Nearly half of the CSU's 450,000 students are engaged in some type of community service, totaling 32 million hours of service annually.

- More than 9,000 students participate in STEM (science, technology engineering and mathematics) service-learning courses.
- For every \$1 that the state invests in the CSU, the university generates \$5.43 for California's economy.

Office of the Chancellor

The California State University
401 Golden Shore
Long Beach, California 90802-4210
(562) 951-4000

- Dr. Timothy P. White, *Chancellor, CSU System*
- Mr. Steve Relyea, *Executive Vice Chancellor and Chief Financial Officer*
- Dr. Ephraim P. Smith, *Executive Vice Chancellor and Chief Academic Officer*
- Mr. Framroze Virjee, *Executive Vice Chancellor and General Counsel*
- Mr. Garrett Ashley, *Vice Chancellor, University Relations and Advancement*
- Ms. Lori Lamb, *Vice Chancellor, Human Resources*
- Mr. Larry Mandel, *Vice Chancellor and Chief Audit Officer*

Campuses - The California State University

View the California map of the California State Universities.

- *California State University, Bakersfield*
 9001 Stockdale Highway, Bakersfield, CA 93311-1022
 Dr. Horace Mitchell, President
 (661) 654-2782; www.csub.edu
- *California State University, Channel Islands*
 One University Drive, Camarillo, CA 93012
 Dr. Richard Rush, President
 (805) 437-8400; www.csuci.edu
- *California State University, Chico*
 400 West First Street, Chico, CA 95929-0150
 Dr. Paul J. Zingg, President
 (530) 898-4636; www.csuchico.edu

- *California State University, Dominguez Hills*
1000 East Victoria Street, Carson, CA 90747-0005
Dr. Willie Hagan, President
(310) 243-3301; www.csudh.edu
- *California State University, East Bay*
25800 Carlos Bee Boulevard, Hayward, CA 94542
Dr. Leroy M. Morishita, President
(510) 885-3000; www.csueastbay.edu
- *California State University, Fresno*
5241 North Maple Avenue, Fresno, CA 93740
Dr. Joseph I. Castro, President
(559) 278-4240; www.csufresno.edu
- *California State University, Fullerton*
800 N. State College Boulevard, Fullerton, CA 92831-3599
Dr. Mildred Garcíá, President
(657) 278-2011; www.fullerton.edu
- *Humboldt State University*
One Harpst Street
Arcata, CA 95521-8299
Dr. Lisa Rossbacher, President
(707) 826-3011; www.humboldt.edu
- *California State University, Long Beach*
1250 Bellflower Boulevard, Long Beach, CA 90840-0115
Dr. Jane Close Conoley, President
(562) 985-4111; www.csulb.edu
- *California State University, Los Angeles*
5151 State University Drive, Los Angeles, CA 90032
Dr. William A. Covino, President
(323) 343-3000; www.calstatela.edu
- *California Maritime Academy*
200 Maritime Academy Drive, Vallejo, CA 94590
Rear Admiral Thomas A. Cropper, President
(707) 654-1000; www.csum.edu
- *California State University, Monterey Bay*
100 Campus Center, Seaside, CA 93955-8001
Dr. Eduardo M. Ochoa, President
(831) 582-3330; www.csumb.edu
- *California State University, Northridge*
18111 Nordhoff Street, Northridge, CA 91330
Dr. Dianne F. Harrison, President
(818) 677-1200; www.csun.edu
- *California State Polytechnic University, Pomona*
3801 West Temple Avenue, Pomona, CA 91768

Dr. Soraya M. Coley, President
(909) 869-7659; www.cpp.edu/

- *California State University, Sacramento*
6000 J Street, Sacramento, CA 95819
Dr. Alexander Gonzalez, President
(916) 278-6011; www.csus.edu
- *California State University, San Bernardino*
5500 University Parkway, San Bernardino, CA 92407-2393
Dr. Tomás D. Morales, President
(909) 537-5000; www.csusb.edu
- *San Diego State University*
5500 Campanile Drive, San Diego, CA 92182
Dr. Elliot Hirshman, President
(619) 594-5200; www.sdsu.edu
- *San Francisco State University*
1600 Holloway Avenue, San Francisco, CA 94132
Dr. Leslie E. Wong, President
(415) 338-1111; www.sfsu.edu
- *San José State University*
One Washington Square, San José, CA 95192-0001
Dr. Mohammad H. Qayoumi, President
(408) 924-1000; www.sjsu.edu
- *California Polytechnic State University, San Luis Obispo*
One Grand Avenue
San Luis Obispo, CA 93407
Dr. Jeffrey Armstrong, President
(805) 756-1111; www.calpoly.edu
- *California State University, San Marcos*
333 S. Twin Oaks Valley Rd., San Marcos, CA 92096-0001
Dr. Karen S. Haynes, President
(760) 750-4000; www.csusm.edu
- *Sonoma State University*
1801 East Cotati Ave., Rohnert Park, CA 94928-3609
Dr. Ruben Armiñana, President
(707) 664-2880; www.sonoma.edu
- *California State University, Stanislaus*
One University Circle, Turlock, CA 95382-0299
Dr. Joseph F. Sheley, Interim President
(209) 667-3122; www.csustan.edu

Ex Officio Trustees

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- The Honorable Gavin Newsom, Lieutenant Governor of California
- The Honorable Toni G. Atkins, Speaker of the Assembly
- The Honorable Tom Torlakson, State Superintendent of Public Instruction
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Chancellor of The California State University

Officers of the Trustees

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Appointed Trustees

Appointments are for a term of eight years, except student, alumni, and faculty trustees whose terms are for two years. Terms expire in the year in parentheses. Names are listed alphabetically.

- Roberta Achtenberg (2015)
- Talar Alexanian (2015)
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- Adam Day (2015)
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- Debra S. Farar (2022)
- Margaret Fortune (2016)
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- J. Lawrence Norton (2019)

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Correspondence with Trustees should be sent to:

c/o Trustees Secretariat
The California State University
401 Golden Shore
Long Beach, CA 90802-4210

Catalog Revisions, Policies and Credits

Changes in Rules and Policies

Although every effort has been made to assure the accuracy of the information in this catalog, students and others who use this catalog should note that laws, rules, and policies change from time to time and that these changes may alter the information contained in this publication. Changes may come in the form of statutes enacted by the Legislature, rules and policies adopted by the Board of Trustees of the California State University, by the Chancellor or designee of the California State University, or by the President or designee of the campus. It is not possible in a publication of this size to include all of the rules, policies and other information that pertain to students, the institution, and the California State University. More current or complete information may be obtained from the appropriate department, college, or administrative office.

Nothing in this catalog shall be construed, operate as, or have the effect of an abridgement or a limitation of any rights, powers, or privileges of the Board of Trustees of the California State University, the Chancellor of the California State University, or the President of the campus. The Trustees, the Chancellor, and the President are authorized by law to adopt, amend, or repeal rules and policies that apply to students. This catalog does not constitute a contract or the terms and conditions of a contract between the student and the campus or the California State University. The relationship of students to the campus and the California State University is one governed by statute, rules, and policy adopted by the Legislature, the Trustees, the Chancellor, the Presidents and their duly authorized designees.

Catalog Production

Acknowledgments

The online *2015-2016 University Catalog* was produced under the direction of the Associate Vice President, Academic Programs and Graduate Studies, Susan B. Opp. and Interim Associate Vice President, Academic Programs and Graduate Studies, Donna Wiley, Department chairs, administrators, and staff also contributed to this team effort.

- *Editor and Project Supervisor:* Sarah Aubert, Catalog and Curriculum Analyst/Specialist, Academic Programs and Graduate Studies

Online Catalog

The online *2015-2016 University Catalog* includes all curricular updates effective for Fall 2015-Summer 2016.

You may need a viewer, Acrobat Reader 4.0 or higher, from Adobe in order to display PDF documents in the online Catalog.

Note: This catalog was re-published October 2, 2015 due to an upgrade in our electronic catalog management system.

Revisions of General Information

This includes all revisions of text in the general information chapters of the catalog. It also includes edits made to general program descriptions in the departmental chapters if a curricular document is not required. These changes do not require an approved curricular proposal. The general information chapters of the catalog and the faculty lists are revised every year.

- **Fall quarter:** *Copies of the general information chapters* are sent to the appropriate administrative offices for editing with a *specified deadline* for returning these copies to the catalog editor, Office of Academic Programs and Graduate Studies.

- **Winter quarter:** *Copies of the revised undergraduate and graduate departmental curricular chapters* are sent to the appropriate departments for review. *Please Note:* Only curricular changes approved by the Office of Academic Programs and Graduate Studies, and the Academic Senate (if needed) will appear in this catalog review copy. Departments will review their chapters for accuracy only. Departments, however, may make minor edits to general program descriptions at this time if a curricular document is not required.

Departments will be asked to return the corrected copies of their departmental chapters to the catalog editor, Office of Academic Programs and Graduate Studies by a *specified deadline*. Given the tight catalog production schedule, this is the only opportunity for departments to review their catalog copy.

Curriculum Proposal Process

There are different approval processes for different types of curriculum proposals. Please refer to the **Curricular Procedures Manual** and/or consult with your **College Curriculum Coordinator**.

- **Why can't we modify courses and revise programs mid-year?**
Student catalog rights are governed by the catalog in effect at the time they declare their undergraduate major/minor or are admitted to a graduate degree program. To avoid confusion, and to honor our agreement with the student, degree requirements and courses cannot be revised mid-year.
- **Why can't we update our faculty list in the departmental chapters as changes occur?**
All faculty changes (including the appointment of departmental Chairs) need to be verified by the Provost's Office as effective beginning the fall quarter that the catalog is effective. Updating the faculty lists each year requires more time than is currently available for the staff in the Provost's Office and the staff in the Office of Academic Programs and Graduate Studies. For an updated and comprehensive list of all university faculty, emeriti faculty, and lecturers with 3-year contracts, visit the Office of Academic Affairs website.
- **Why don't all our department's emeriti faculty appear in the departmental chapter's faculty list?**
Only the names of emeriti faculty who are currently teaching in the department appear in the departmental chapter. All emeriti faculty, however, appear in the comprehensive faculty list maintained by the Office of Academic Affairs (see above), with the exception of those who are deceased.
- **I have additional questions. Who should I contact?**
For questions concerning the catalog production process: Contact the **Catalog Editor**, Office of Academic Programs and Graduate Studies (4th Floor, Student Services and Administration Building; Tel. 885-3271).

For questions concerning the status of your curriculum proposal: Contact your **College Curriculum Coordinator**.

Appendix

California State University, East Bay Foundation, Inc.

California State University, East Bay Foundation, Inc. is a non-profit auxiliary organization within the California State University system. The Foundation contracts with Follett to manage the Pioneer Bookstore and receives grants from federal, state and local governments and private foundations on behalf of the Office of Sponsored Research and Programs in support of the University.

The CSUEB Foundation is governed by a board of directors comprised of faculty, students, staff, administrators and community members. The Foundation is incorporated as a nonprofit public benefit corporation and is exempt from federal income tax under section 501(c)(3) of the Internal Revenue Code.

Cal State East Bay Educational Foundation

Cal State East Bay recognizes that the margin of excellence in institutions of higher education depends increasingly on external funding from alumni, corporations, foundations, and individual donors. In order to further the university's mission of service to the region, the Cal State East Bay Educational Foundation was formed in 1990 to help forge partnerships with the private sector. The foundation is governed by a board of trustees which includes university leaders and prominent members of the community.

Career Information

Academic Advising and Career Education (AACE) will furnish, upon request, information about the employment of students who graduate from programs or courses of study preparing students for a particular career field. Any such data provided must be in a form that does not allow the identification of any individual student. This information includes data concerning the average starting salary and the percentage of previously enrolled students who obtained employment. The information may include data collected from either graduates of the campus or graduates of all campuses in the California State University.

Credit Hour

As of July 1, 2011 federal law (Title 34, Code of Federal Regulations, sections 600.2 and 600.4) requires all accredited institutions to comply with the federal definition of the credit hour. For all CSU degree programs and courses bearing academic credit, the "credit hour" is defined as "the amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than:

1. One hour of classroom or direct faculty instruction and a minimum of two hours of out-of class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or
2. At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution, including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours."

A credit hour is assumed to be a 50-minute period. In courses, in which "seat time" does not apply, a credit hour may be measured by an equivalent amount of work, as demonstrated by student achievement.

Data Integrity Policy

Student, Faculty, and University Responsibilities to Ensure the Data Integrity of Academic Work

- I. Purpose and Scope The purpose of this policy is to establish the rights and responsibilities of students, faculty, and the university in regards to the loss, re-attempt, and/or resubmission of coursework data in the event of verified data or service loss. This policy applies to student and faculty interactions with academic systems or academic functions within more comprehensive systems and does not apply to administrative systems or functions.

II. Definitions of Data Loss

Catastrophic data loss is defined as the absolute corruption or destruction of data without any chance of recoverability on the part of its owner through data redundancy measures.

Data redundancy measures refer to the means and methods for saving and restoring copies of data prior to the point of its absolute corruption or destruction. This is more commonly known as making a "*backup*" of data.

Service loss is defined as the loss of services that interrupt and prevent the normal flow of academic work.

Examples of such services include the Learning Management System (LMS), other systems through which assignments are digitally submitted (for example, network drives), data housed on third-party applications such as Google, VoiceThread, or Pearson, or software provided by companies such as Wordpress.

III. Coursework Data

Coursework data is defined as digital products, materials, and works created, edited, and completed by the student or with which the student interacts as required by coursework specified by the instructor. Coursework data takes many forms, some of which include single data files (e.g. word processing files, presentation files, multimedia files), compressed archives (e.g. .zip files, .rar files), interactive coursework and assessments (e.g. online exams), and synchronous and asynchronous communication across multiple computing platforms (e.g. webinars, synchronous collaborative documents). While these examples represent a wide variety of the kinds of coursework data that may be required in a classroom, it is understood that the pace of change and innovation in technology introduces new and updated types of coursework data that may not be listed here but are also included as part of this policy.

IV. Responsibilities for the Prevention or Management of Data Loss

Multiple individual users and groups are responsible for the prevention and restoration of data and service, and the mitigation of damage when irreversible loss occurs. These include: the university, third-party vendors, and end users.

The University

Data and/or service loss resulting from university systems is known as *institutional data loss*. The university is responsible for ensuring the integrity of services it provides, either directly, if the data resides on university servers, or indirectly, if the data resides on servers operated by third-party vendors. To minimize the impact of university systems failure, appropriate university personnel will

- ensure that data is backed up on a regular schedule;
- restore lost data as quickly as possible; and
- communicate necessary information via Campus Announcements, including the appropriate requirements of this policy, and providing follow-up Campus Announcements regarding the status of services, as needed.

Third-party Vendors and Software

In the case of data or service loss by third-party vendors or the use of software not provided by the university, variations will occur depending on the stability and depth of the company providing data, services or software. Within its ability, the university will:

- ensure that provisions related to the prevention and restoration of data and/or services are included in contracts, and also requirements that the vendor back up data regularly and notify the university when data or service loss occurs;
- notify the third-party vendor of observable losses when noted at the university;
- work with the third-party vendor to ensure that data is restored from the last back-up and/or that service is restored as quickly as possible;
- ensure that the vendor provides appropriate communications to the university regarding the status of data and services; and
- receive and interpret vendor communications and/or communicate necessary information via a Campus Announcement, invoking the appropriate requirements of this policy, as appropriate; and provide follow-up Campus Announcements regarding the status of data and services, as needed.

Campus Announcements should stipulate

- the nature of the problem;
- the actions being taken to resolve the problem; and
- the anticipated recovery time, as soon as it is known.

While the university is indirectly responsible for working with third-party vendors and communicating appropriately to the user community, the university cannot be directly held responsible for third-party data losses. Further, should individual faculty, departments, or colleges contract with third-party vendors for data services without the knowledge, authorization, and approval of the institution, the individual, department, or college will be responsible for ensuring data integrity and communicating with the group of users involved in those services.

Individual Users Individual users (students and faculty) are responsible for preventing data loss by making backups of coursework data. The minimum recommended number of backups is two. Examples of backup methods include: flash drives, emailing documents to self, use of a third party service such as Carbonite, and backup to external drives. Regardless of the method chosen, backups should be conducted regularly and often, and individuals should "save" their work frequently throughout its creation.

It is also important to note that if an individual is working on a university computer (in offices, in the learning commons/library, or elsewhere on campus), the individual is responsible for making appropriate back-ups and saving often to ensure data integrity. Work being created by an individual during a computer crash is the responsibility of that individual. If back-ups are made sufficiently often, no or minimal loss should occur and restoration should be simple. The exception is if the data cannot be backed up regularly, e.g., during the taking of a test in BlackBoard.

V. Rights in the Case of Data Loss In the case of data loss as a result of the failure of the university or third-party vendors, i.e., a loss that is not the responsibility of students or faculty, accommodations will be made to mitigate negative consequences that may result. Examples of system failures include:

- unscheduled downtime (a "crash"), where an assignment is due between the time of the crash and the last system backup or the last possible restoration point in the case of a failed backup. This could occur in the LMS or in a computer lab;
- unacceptable patterns of slowness/crash/partial recovery/full recovery occurring when assignments are due or online exams/quizzes/tests are underway, making it impossible for students to meet deadlines;
- third-party service interruption or stoppage where students are unable to complete assignments or work by deadlines; and
- power outages in computer labs during exams.

When possible, Information Technology will notify the university community of system failures, but not all will be immediately visible to a faculty member. If no Campus Announcement has been issued, faculty should verify any student-reported loss with the Information Technology Service Desk to determine if s/he should implement this policy.

It is understood that there are conditions that are beyond the control of an individual. As a result, faculty are advised to provide students with alternate means of submission in event of an application or browser failure or some other condition, and to include a description of these alternate means in their syllabi. Should data loss occur due to a student's not fulfilling his/her responsibility to back up data appropriately, however, the student is responsible for that failure.

- VI. Policy Statements When an institutional data loss or loss of service is verified by Information Technology Services (ITS) and noted on the learning management site (LMS), students will be allowed to resubmit coursework data and re-attempt tests within 72 hours of the implementation of data redundancy measures and the restoration of service by the institution as verified by ITS. If the window for completing coursework or tests is shorter than 72 hours, a new window (start-stop times) can be created by the faculty member, but a time frame of 72 hours takes into account the possibility that loss and restoration might occur over a weekend period.

For required third-party online sites, such as homework sites associated with publishers, the faculty member will post the method for notification of outages or malfunctions with his/her syllabus on Blackboard. Students shall be given at least 72 hours after restoration of service to complete assignments.

When data loss takes the form of a university computer lab failing during an examination period (for example, a blackout occurs during a midterm), the faculty member shall provide an appropriate accommodation for the resumption of the exam.

Beyond these conditions, students bear the sole responsibility for backing up their coursework data and ensuring data redundancy in the event of non-institutional data loss.

In addition to providing statements in their syllabi about accommodations in case of data loss, faculty should also provide a statement to explain students' responsibilities in regards to backing up their data. Suggesting phrasing is as follows:

"Accommodations will be made for systems failures beyond students' control. These include:

- [list accommodation information here]

Accommodations will not be made for failure to complete an assignment or project because data has not been backed up.

The "golden rule" for data is that it does not exist unless you back up your data in two or more places on at least two different types of media and make sure that the backup is not in a temporary file that will disappear when you close the program or shut down your computer.

Immigration Requirements for Licensure

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (P.L. 104-193), also known as the Welfare Reform Act, includes provisions to eliminate eligibility for federal and state public benefits for certain categories of lawful immigrants, as well as benefits for all illegal immigrants.

Students who will require a professional or commercial license provided by a local, state, or federal government agency in order to engage in an occupation for which the CSU may be training them must meet the immigration requirements of the Personal Responsibility and Work Opportunity Reconciliation Act to achieve licensure. (Students in Biological Science, Educational Psychology, Engineering, Kinesiology, Nursing, and Teacher Education, in particular should be aware of these provisions.)

Military Selective Service Act

The federal Military Selective Service Act (the "Act") requires most males residing in the United States to present themselves for registration with the Selective Service System within thirty days of their eighteenth birthday. Most males between the ages of 18 and 25 must be registered. Males born after December 31, 1959 may be required to submit a statement of compliance with the Act and regulations in order to receive any grant, loan, or work assistance under specified provisions of existing federal law. In California, students subject to the Act who fail to register are also ineligible to receive any need-based student grants funded by the state or a public post-secondary institution.

Selective Service registration forms are available at any U.S. Post Office and many high schools have a staff member or teacher appointed as a Selective Service Registrar. Applicants for financial aid can also request that information provided on the Free Application for Federal Student Aid (FAFSA) be used to register them with the Selective Service. Information on the Selective Service System is available and the registration process may be initiated online at <http://www.sss.gov>.

Nondiscrimination/Harassment Policies and Procedures

Inquiries concerning compliance with the following policies may be addressed to the Risk Management & Internal Control (Student Services and Administration Building), 510-885-4918; TTY 510-885-7592. The complaint procedures are set forth in detail and can be found on the Student Complaint Procedure website.

Inquiries concerning compliance or the application of these laws to programs and activities of Cal State East Bay may be referred to the specific campus officer(s) identified above or to the Regional Director of the Office for Civil Rights, United States Department of Education, 50 Beale Street, Suite 7200, San Francisco, California 94105.

Age, Marital Status or Religion

By CSU Board of Trustees policy, the California State University does not discriminate on the basis of age, marital status or religion.

Religious Observance

The faculty of California State University East Bay, welcoming the religious and spiritual diversity of our student body, recognize that upon occasion students' religious observances may conflict with other requirements. California Education Code Section 89320 requires faculty to reschedule a test or examination, without penalty to the student, when the regularly scheduled test or examination conflicts with the student's religious observances. Students with other scheduling conflicts related to religious observance should bring these to the attention of the instructor in a timely manner, so that the student will be accommodated, if at all possible.

Disability

The California State University does not discriminate on the basis of disability in its programs and activities, including admission and access. Federal and state laws, including sections 504 and 508 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, prohibit such discrimination. Jill Millican, Director of Community Wellness, has been designated to coordinate the efforts of Cal State East Bay to comply with all applicable federal and state laws prohibiting discrimination on the basis of disability. Inquiries concerning compliance may be presented to Ms. Millican at Cal State East Bay, Risk Management and Internal Control, 25800 Campus Drive, Hayward, CA 94542, 510-885-4227.

HIV/AIDS

The hiring process and employment practices for University employees and the student admission process to the University or any program within or related to the University shall not include consideration of an individual's HIV/AIDS status or perceived inclusion in a high risk group.

Race, Color, Ethnicity, National Origin, Age and Religion

The California State University does not discriminate on the basis of race, color, ethnicity, national origin, age, or religion in its programs and activities, including admission and access. Federal and state laws, including Title VI of the Civil Rights Act of 1964 and the California Equity in Higher Education Act, prohibit such discrimination. Risk Management has been authorized to coordinate the efforts of Cal State East Bay to comply with all applicable federal and state laws prohibiting discrimination on these bases. Inquiries concerning compliance may be presented to this person at Cal State East Bay, Student Services and Administration Building, 25800 Campus Drive, Hayward, CA 94542, 510-885-4918; TTY 510-885-7592

Sex/Gender/Gender Identity/Sexual Orientation

The California State University does not discriminate on the basis of sex, gender, gender identity or sexual orientation in its programs and activities, including admission and access. Federal and state laws, including Title IX of the Education Amendments of 1972, prohibit such discrimination. Inquiries concerning compliance may be presented to this person at Equal Employment Opportunity contact, Risk Management and Internal Control, California State University, East Bay, 25800 Carlos Bee Boulevard, Hayward, CA 94542-3026, 510-885-2743 (Voice), 510-885-7592 (TTY); Fax: 510-885-4690.

The California State University is committed to providing equal opportunities to male and female CSU students in all campus programs, including intercollegiate athletics.

Sexual Harassment

The university desires to maintain an academic and work environment which protects the dignity and promotes the mutual respect of all employees and students. Sexual harassment of employees or students is prohibited. In general, verbal comments, gestures, or physical contact of a sexual or gender-based nature that are unsolicited and unwelcomed will be considered harassment (Title VII of the Civil Rights Act of 1964). Visit the Title IX Website for complete information.

Sexual harassment is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual/gender-based nature when:

- submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment, appointment, admission, or academic evaluation;
- submission to such conduct is used as a basis for evaluation in personnel decisions or academic evaluations affecting an individual;
- such conduct has the purpose or effect of unreasonably interfering with an individual's performance or of creating an intimidating, hostile, offensive, or otherwise adverse working or educational environment;
- the conduct has the purpose or effect of interfering with a student's academic performance; creating an intimidating, hostile, offensive, or otherwise adverse learning environment; or adversely affecting any student.

Sexual harassment happens to both men and women. In determining whether conduct constitutes sexual harassment, the circumstances surrounding the conduct should be considered.

Sexual harassment may include one or more of the following: questions about one's sexual behavior; sexually oriented jokes; inappropriate comments about one's body and clothing; conversation filled with innuendoes and double meanings; sexually suggestive pictures or objects displayed to embarrass or humiliate; pinching, fondling, patting or kissing; requests for sexual intercourse; gender-based derogatory statement; unfavorable consequences for refusing to submit.

Nonresident Tuition Exceptions

There are exceptions from nonresident tuition, including:

1. Persons below the age of 19 whose parents were residents of California but who left the state while the student, who remained, was still a minor. When the minor reaches age 18, the exception continues until the student has resided in the state the minimum time necessary to become a resident.
2. Minors who have been present in California with the intent of acquiring residence for more than a year before the residence determination date, and entirely self-supporting for that period of time. The exception continues until the student has resided in the state the minimum time necessary to become a resident.
3. Persons below the age of 19 who have lived with and been under the continuous direct care and control of an adult or adults, not a parent, for the two years immediately preceding the residence determination date. Such adult must have been a California resident for the most recent year. The exception continues until the student has resided in the state the minimum time necessary to become a resident.
4. Dependent children and spouse of persons in active military service stationed in California on the residence determination date. There is no time limitation on this exception unless the military person transfers out of California or retires from military service. If either of those events happen, the student's eligibility for this exception continues until he or she resides in the state the minimum time necessary to become a resident.
5. Military personnel in active service stationed in California on the residence determination date for purposes other than education at state-supported institutions of higher education. This exception continues until the military personnel has resided in the state the minimum time necessary to become a resident.
6. Military personnel in active service in California for more than one year immediately prior to being discharged from the military. Eligibility for this exception runs from the date the student is discharged from the military until the student has resided in state the minimum time necessary to become a resident.
7. Dependent children of a parent who has been a California resident for the most recent year. This exception continues until the student has resided in the state the minimum time necessary to become a resident, so long as continuous attendance is maintained at an institution.
8. Graduates of any school located in California that is operated by the United States Bureau of Indian Affairs, including, but not limited to, the Sherman Indian High School. The exception continues so long as continuous attendance is maintained by the student at an institution.
9. Certain credentialed, full-time employees of California school districts.
10. Full-time CSU employees and their children and spouse; State employees assigned to work outside the State and their children and spouse. This exception continues until the student has resided in the state the minimum time necessary to become a California resident.
11. Children of deceased public law enforcement or fire suppression employees who were California residents and who were killed in the course of law enforcement or fire suppression duties.
12. Certain amateur student athletes in training at the United States Olympic Training Center in Chula Vista, California. This exception continues until the student has resided in the state the minimum time necessary to become a resident.
13. Federal civil service employees and their natural or adopted dependent children if the employee has moved to California as a result of a military mission realignment action that involves the relocation of at least 100 employees. This exception continues until the student has resided in the state the minimum time necessary to become a resident.

14. State government legislative or executive fellowship program enrollees. The student ceases to be eligible for this exception when he or she is no longer enrolled in the qualifying fellowship.

Reporting Campus Emergencies

When reporting an on-campus emergency, call the following numbers:

On-campus Emergencies

Police, Fire, Medical:

911 from any phone

911 calls from cell phones are routed to Hayward Police Department, then back to University Police Department

Other frequently called numbers are:

On-campus Non-Emergencies

Police Business: x5-3791

Escort Service: x5-3791

Crime Prevention Service: x5-3791

Lost and Found Property: x5-3791

Anonymous Report: x5-2444

Parking Services: x5-3790

Student Health Services: x5-3735

Counseling and Psychological Services: x5-3690

University Information: x5-3000

Facilities Development & Operations: x5-4444

Note: When using a non-campus phone, you must use the "885" prefix instead of "5" in the above extensions; when using a (white) campus phone, simply use the extensions.

Research with Human Subjects

The University has approved policies and procedures for the protection of human subjects in research, development, and related activities carried out by faculty, staff and students. An Institutional Review Board has been established to review research protocols in order to determine whether human subjects would be at risk and to protect their rights and welfare. Protocols must be approved before research commences. Further information and copies of the policy document may be obtained from the Office of Research and Sponsored Programs, LI 2300, 885-4212 or online at: <http://www.csueastbay.edu/orsp/IRBMenu.html>.

Student Freedoms, Rights, and Responsibilities

California State University East Bay exists for the transmission of knowledge, the pursuit of truth, the development of students, and the general well-being of society. Free inquiry and free expression are indispensable to the attainment of these goals. As members of the academic community, students are encouraged and expected to develop the capacity for critical judgment, to accept appropriate responsibilities, and to engage in rational debate utilizing critical thinking, in a sustained and independent search for truth.

Freedom to teach and freedom to learn are inseparable components of academic freedom. The freedom to learn depends largely upon appropriate opportunities and conditions in the classroom, on the campuses and in the larger community. The responsibility to secure and to respect general conditions conducive to the freedom to teach and learn is shared by all members of the academic community.

The following standards and regulations on students' freedoms, rights, and responsibilities are authorized by federal and state laws and by CSU policies.

Freedoms, Rights, and Responsibilities for Access and Retention

In all aspects of access to programs and services provided or sponsored by the institution, students have a right to be free from discrimination on the basis of individual attributes, including, but not limited to race, color, gender, age, disability, national origin, or sexual orientation. Admission to the university is limited by standards which are promulgated by the California legislature and the CSU Board of Trustees. Realities of the campus budget and facilities may impose additional constraints.

Beyond academic, fiscal, and physical limits to admission to the university, prospective and enrolled students have a right to unobstructed access to campus programs and services. In special cases, and with the CSU chancellor's concurrence, selected degree programs may be given "impacted" status, which adds certain stipulations and/or restriction on access to those majors.

Students have a right to be informed about the institution's policies for access and retention in order to take responsibility for making appropriate choices and to participate effectively in campus programs and services. Issues regarding freedom of access should be referred to the supervisor(s) of the appropriate program or service first. If the matter is not resolved satisfactorily, the student has the right to refer the issue through administrative channels to the Vice Presidents, or to Academic Affairs.

Fundamental Freedoms, Rights, and Responsibilities

A basic component of the university mission statement is the value of diversity in background, interests, experiences, beliefs, and cultures. Faculty, staff and students represent a variety of interests. Students come to campus with unique experiences, and while on campus, as a result of their interaction in the formal classroom and co-curricular programs and activities, they continue to develop and expand their knowledge and pursuits.

In the Classroom

The institution maintains minimum standards in order to preserve the following fundamental freedoms for students:

Freedom to teach and freedom to learn are inseparable components of academic freedom. Student academic freedom is incorporated into the classroom setting where learning is concentrated and structured. Faculty and students share responsibility for student academic freedom in the classroom. The following minimum standards enhance student academic freedom in the classroom.

- *Freedom of Expression*
Students are free to take reasonable exception to the data or views offered in any course of study and to reserve judgment about matters of opinion. Students are responsible for learning the content of any course of study for which they are enrolled.
- *Protection Against Improper Academic Evaluation*
Students are responsible for maintaining standards of academic performance established for each course in which they are enrolled. Orderly procedures protect students from prejudice or capricious academic evaluation.
- *Protection against improper disclosure*
Policies and practices protect students from improper disclosure of information about the students' views, beliefs, and political activities which professors acquire in the course of their work as instructors, advisers, and counselors and such information shall be considered confidential. Judgments of academic ability and character may be provided under appropriate circumstances, normally with the knowledge or consent of the student.
- The Grade Appeal and Academic Grievance Committee (Academic Programs and Graduate Studies, Student Services and Administration Building, 4500), which operates under the supervision of the Academic Senate, exists to resolve grade disputes and other academic grievances. Reports of discrimination will be handled by the Director, Office of Equity and Diversity (Student Services and Administration Building), 510-885-4918; TTY 510-885-7592.

Reports of student misconduct including those relating to academic dishonesty will be handled by the Office of Student Conduct, Rights and Responsibilities, <http://www.csueastbay.edu/sdja> (Student Services and Administration Building, 1st Floor) 510-885-3763.

Student Publications

Student publications and the student press are valuable aids in establishing and maintaining an atmosphere of free and responsible discussion and intellectual exploration on the campus.

Students and faculty who produce student publications have the responsibility to establish and adhere to standards of responsible journalism. While student publications and the student press operate with limited external control, the editorial freedom of student editors and managers entails corollary responsibilities to be governed by the concerns of responsible journalism, such as evidence of libel, indecency, undocumented allegations, attacks on personal integrity, and the techniques of harassment and innuendo.

Freedom of Association

Students are free to organize and join associations to promote their common interests and to have these associations be considered for recognition by the university. "Institutional recognition" is understood to refer to the formal relationship between the student organization and the institution. Recognized student organizations are responsible for abiding by all institutional regulations for student organizations. These regulations are available in the office of Student Life Programs (New University Union, 2nd Floor).

Freedom of Inquiry and Expression

Students and student organizations are free to examine and discuss all questions of interest to them and to express opinions publicly and privately as long as others' rights are not violated in the process. Students are always free to support causes by orderly means which do not disrupt the regular and essential operation of the institution. However, such public expressions or demonstrations speak only for the student(s) involved, and not for the institution.

Student Participation in Institutional Government

Students are free to elect peers to serve and represent them in university government as members of the student body. Students who meet eligibility criteria are appointed to various standing committees by the administration and faculty upon the recommendation of the Associated Students Board of Directors. The role of student government is explicitly defined in the California Education Code and CSU policies. Copies of these regulations can be obtained in the office of the Associate Vice President, Student Affairs (Student Services and Administration Building, 4th Floor).

Off-Campus Freedom of Students

The university has the responsibility to protect students' citizenship rights on campus, and with regard to approved activities which occur off campus. Off-campus activities of students may, upon occasion, result in violation of the law. Students who violate the law may incur penalties prescribed by civil authorities, but institutional authority will not be used merely to duplicate the functions of general laws.

As stated in the University's Policy on Time, Place and Manner of Free Expression, "Universities are venues for creative, thoughtful and respectful discourse where conflicting perspectives are vigorously debated and thoroughly discussed." The University's policy can be found online at: www20.csueastbay.edu/policies/index.html.

Privacy Rights of Students in Education Records

The Federal Family Educational Rights and Privacy Act of 1974 (20 U.S.C. 1232g) and regulations adopted thereunder (34 C.F.R. 99), set out requirements designed to protect the privacy of student education records maintained by the campus. The text of the statute can be found online at: www20.csueastbay.edu/students/student-services/student-records/ferpa-privacy-policy.html. The law provides that the campus must give students access to most records directly related to the student. The campus must also provide an opportunity for a hearing to challenge the records if the student claims they are inaccurate, misleading, or otherwise inappropriate. The right to a hearing under this law does not include any right to challenge the appropriateness of a grade determined by the instructor. The institution has adopted a set of policies and procedures governing implementation of the statutes and regulations. Copies of these policies and procedures may be obtained at Office of the Registrar, Student Services and Administration Building, 3rd Floor. Among the types of information included in the campus statement of policies and procedures are:

1. the types of student records maintained and the information they contain;
2. the official responsible for maintaining each type of record;
3. the location of access lists indicating persons requesting or receiving information from the record;
4. policies for reviewing and expunging records;
5. student access rights to their records;
6. the procedures for challenging the content of student records;
7. the cost to be charged for reproducing copies of records; and
8. the right of the student to file a complaint with the Department of Education. The Department of Education has established an office and review board to investigate complaints and adjudicate violations. The designated office is: Family Policy Office, U.S. Department of Education, Washington, D.C. 20202-4605.

The campus is authorized under the Act to release "directory information" concerning students. "Directory information" may include the student's name, Net ID, addresses, telephone numbers, e-mail address, photograph, department where employed, student employee's status, (i.e., TA GA, ISA), full-time or part-time status, graduate or undergraduate status, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, grade level, enrollment status, degrees, honors, and awards received, and the most recent previous educational agency or institution attended by the student. The above designated information is subject to release by the campus at any time unless the campus has received prior written objection from the student specifying what information the student requests not be released. Written objections should be sent to the Office of the Registrar, Student Services and Administration Building, 3rd Floor.

The campus is authorized to provide access to student records to campus officials and employees who have legitimate educational interests in such access. These persons have responsibilities in the campus' academic, administrative or service functions and have reason for accessing student records associated with their campus or other related academic responsibilities. Student records may also be disclosed to other persons or organizations under certain conditions (e.g., as part of the accreditation or program evaluation; in response to a court order or subpoena; in connection with financial aid; to other institutions to which the student is transferring.) In cases of emergency, certain student education records may be released to appropriate individuals.

Student Complaint Procedure

The California State University takes very seriously complaints and concerns regarding the institution. If you have a complaint regarding the CSU, you may present your complaint as follows:

1. If your complaint concerns CSU's compliance with academic program quality and accrediting standards, you may present your complaint to the Western Association of Schools and Colleges (WASC) at <http://www.wascsenior.org/comments>. WASC is the agency that accredits the CSU's academic program.
2. If your complaint concerns an alleged violation by CSU of a state law, including laws prohibiting fraud and false advertising, you may present your claim to Ms. Maggie Graney, Interim Director for Compliance and Internal Control, maggie.graney@csueastbay.edu, who will provide guidance on the appropriate campus process for addressing your particular issue.

If you believe that your complaint warrants further attention after you have exhausted all the steps outlined by the president or designee, or by WASC, you may file an appeal with the Associate Vice Chancellor, Academic Affairs at the CSU Chancellor's Office. This procedure should not be construed to limit any right that you may have to take civil or criminal legal action to resolve your complaint.

Alcohol, Tobacco and Other Drugs Prevention Program

Alcohol, Tobacco and Other Drugs Prevention Program

The California State University, East Bay Alcohol, Tobacco and Other Drugs (ATOD) Advisory Council was established fall 2001 in response to the Chancellor's directive that CSU campuses provide special attention to the development of alcohol, tobacco and other drugs policies and prevention programs. The ATOD Council includes representation from CSUEB students, staff, faculty and the community and is divided into four subcommittees: Policy, Assessment, Education and Prevention, and Community/Treatment.

The ATOD Education and Prevention subcommittee is responsible for: dissemination and communication of the CSUEB AOD Policy to students, parents, staff and faculty; training CSUEB staff on ATOD issues; providing educational programming; and initiating a social norms campaign on campus. The university also collaborates with local community agencies to further ATOD prevention and enforcement activities.

Cal State East Bay participates in the following campus alcohol education/awareness activities: Fall Welcome Week; Homecoming Week; Spring Break; "Soberfest," Alcohol Awareness Day; Alcohol Awareness Evening at the Residence Halls; "Alcohol Jeopardy" at the Residence Halls; Resident Advisor (RA) alcohol training; Date rape programming. Contact the Health Promotions Department in Student Health Services at 510-885-3733 for additional information.

Policies, Standards and Procedures for Use of Alcohol and Other Drugs

- The possession and/or consumption of alcoholic beverages by anyone under 21 years of age is prohibited at all times on campus, and is subject to the penalties imposed by state law and university policies.
- Alcoholic beverages may be served on special occasions with prior approval at functions sponsored by approved student, faculty, staff, or administrative organizations, or by campus-related or off-campus organizations contracting for the use of university facilities. Service will normally be permitted only in conjunction with food service. Service of alcohol on these occasions is not allowed before 4:00 p.m. on weekdays during academic quarters. Exceptions to this rule may be granted for events held in the University Union, or at the discretion of a vice president who is responsible for approval.
- All organizations, departments or individuals planning to serve alcohol at any Cal State East Bay function must have completed the online Responsible Beverage Server Training and received approval to serve alcohol from the appropriate Associate Vice President at least five working days prior to the planned event.
- Use of illicit drugs (including performance enhancing substances such as anabolic steroids) is forbidden.

Policy Violation and Sanctions

In the Workplace

Any faculty, staff, administrator or other employee who violates the policy on alcohol and other drugs shall be subject to corrective or disciplinary action up to, and including the possibility of dismissal, in accordance with appropriate collective bargaining agreements, CSU policies and state and federal law. At the discretion of the university, employees found to be in violation of university policy may be required to participate in a substance abuse program, employee assistance program, or other forms of counseling.

Students, Student Organizations and Off-Campus Organizations or Individuals

Any student who violates the policy on alcohol and other drugs shall be subject to corrective action, such as participation in a substance abuse program or other counseling, or disciplinary action up to, and including the possibility of dismissal from the institution.

In addition to the foregoing, the following sanctions may be imposed for violation of the alcohol and drug policy by employees, students or student organizations in accordance with the objectives set forth in the university statement on student rights and responsibilities:

- *Sanctions for individuals:*
 1. Restitution for any damages that result from the conduct of the violator;
 2. Violators will be required to go through an alcohol or other drugs education program.
- *Sanctions for student groups/organizations:*
 1. Social probation for a specified period of time;
 2. Restitution for any damages that result from the conduct of the violator;
 3. Freezing of funds, if any are available;
 4. Report of violations to the national headquarters or offices of the organizations if such exist;
 5. Removal of officers from office;
 6. Loss of university recognition and access to campus support services. University departments may impose additional sanctions for conduct in violation of policies established by the department, as well as violations of the University Alcohol and Other Drugs Policy.

Alcohol and Other Drugs Risks and Resources

There are many documented risks associated with alcohol and other drug abuse affecting individuals, families and friends. Alcohol and other drug abuse can lead to serious health and social problems, including short and long-term effects on the body and mind. Additionally, alcohol and other drug abuse can affect academic, athletic, work performance, and can lead to violent or destructive behaviors. There is also a strong relationship between alcohol and other drug abuse and risk of inappropriate sexual behaviors. For a more complete list of the negative effects of alcohol and other drugs visit the Student Health and Counseling Services website.

CSUEB Campus and Community Resources

For Students: Student Health and Counseling Services (SHS): 510-885-3735

For Faculty and Staff: Employee Assistance Program (EAP):1-800-234-5465

Assessment and Referral: 1-800-486-1652

National Alcohol and Drug Treatment Referral: 1-800-454-8966

Alcoholics Anonymous Meetings: East Bay Central Office Directory, 510-839-8900 (24 hrs/day)

For additional information, including the complete Alcohol, Tobacco and Other Drugs Policy and list of community resources, see the Student Health and Counseling Services website.

Title 5 Section 41301 Standards for Student Conduct

a. *Campus Community Values*

The university is committed to maintaining a safe and healthy living and learning environment for students, faculty, and staff. Each member of the campus community should choose behaviors that contribute toward this end. Students are expected to be good citizens and to engage in responsible behaviors that reflect well upon their university, to be civil to one another and to others in the campus community, and contribute positively to student and university life.

b. *Grounds for Student Discipline*

Student behavior that is not consistent with the Student Conduct Code is addressed through an educational process that is designed to promote safety and good citizenship and, when necessary, impose appropriate consequences.

The following are grounds upon which student discipline can be based:

1. Dishonesty, including:
 - A. Cheating, plagiarism, or other forms of academic dishonesty that are intended to gain unfair academic advantage.
 - B. Furnishing false information to a university official, faculty member, or campus office.
 - C. Forgery, alteration, or misuse of a university document, key, or identification instrument.
 - D. Misrepresenting oneself to be an authorized agent of the university or one of its auxiliaries.
2. Unauthorized entry into, presence in, use of, or misuse of university property.
3. Willful, material and substantial disruption or obstruction of a university-related activity, or any on-campus activity.
4. Participating in an activity that substantially and materially disrupts the normal operations of the university, or infringes on the rights of members of the university community.
5. Willful, material and substantial obstruction of the free flow of pedestrian or other traffic, on or leading to campus property or an off-campus university related activity.
6. Disorderly, lewd, indecent, or obscene behavior at a university related activity, or directed toward a member of the university community.
7. Conduct that threatens or endangers the health or safety of any person within or related to the university community, including physical abuse, threats, intimidation, harassment, or sexual misconduct.
8. Hazing, or conspiracy to haze. Hazing is defined as any method of initiation or pre-initiation into a student organization or student body, whether or not the organization or body is officially recognized by an educational institution, which is likely to cause serious bodily injury to any former, current, or prospective student of any school, community college, college, university or other educational institution in this state (Penal Code 245.6), and in addition, any act likely to cause physical harm, personal degradation or disgrace resulting in physical or mental harm, to any former, current, or prospective student of any school, community college, college, university or other educational institution. The term "hazing" does not include customary athletic events or school sanctioned events.

Neither the express or implied consent of a victim of hazing, nor the lack of active participation in a particular hazing incident is a defense. Apathy or acquiescence in the presence of hazing is not a neutral act, and is also a violation of this section.
9. Use, possession, manufacture, or distribution of illegal drugs or drug-related paraphernalia, (except as expressly permitted by law and university regulations) or the misuse of legal pharmaceutical drugs.

10. Use, possession, manufacture, or distribution of alcoholic beverages (except as expressly permitted by law and university regulations), or public intoxication while on campus or at a university related activity.
11. Theft of property or services from the university community, or misappropriation of university resources.
12. Unauthorized destruction, or damage to university property or other property in the university community.
13. Possession or misuse of firearms or guns, replicas, ammunition, explosives, fireworks, knives, other weapons, or dangerous chemicals (without the prior authorization of the campus president) on campus or at a university related activity.
14. Unauthorized recording, dissemination, or publication of academic presentations (including handwritten notes) for a commercial purpose.
15. Misuse of computer facilities or resources, including:
 - A. Unauthorized entry into a file, for any purpose.
 - B. Unauthorized transfer of a file.
 - C. Use of another's identification or password.
 - D. Use of computing facilities, campus network, or other resources to interfere with the work of another member of the university community.
 - E. Use of computing facilities and resources to send obscene or intimidating and abusive messages.
 - F. Use of computing facilities and resources to interfere with normal university operations.
 - G. Use of computing facilities and resources in violation of copyright laws.
 - H. Violation of a campus computer use policy.
16. Violation of any published university policy, rule, regulation or presidential order.
17. Failure to comply with directions of, or interference with, any university official or any public safety officer while acting in the performance of his/her duties.
18. Any act chargeable as a violation of a federal, state, or local law that poses a substantial threat to the safety or well-being of members of the university community, to property within the university community or poses a significant threat of disruption or interference with university operations.
19. Violation of the Student Conduct Procedures, including:
 - A. Falsification, distortion, or misrepresentation of information related to a student discipline matter.
 - B. Disruption or interference with the orderly progress of a student discipline proceeding.
 - C. Initiation of a student discipline proceeding in bad faith.
 - D. Attempting to discourage another from participating in the student discipline matter.
 - E. Attempting to influence the impartiality of any participant in a student discipline matter.
 - F. Verbal or physical harassment or intimidation of any participant in a student discipline matter.
 - G. Failure to comply with the sanction(s) imposed under a student discipline proceeding.

20. Encouraging, permitting, or assisting another to do any act that could subject him or her to discipline.

c. *Procedures for Enforcing This Code*

The Chancellor shall adopt procedures to ensure students are afforded appropriate notice and an opportunity to be heard before the University imposes any sanction for a violation of the Student Conduct Code.

d. *Application of this Code*

Sanctions for the conduct listed above can be imposed on applicants, enrolled students, students between academic terms, graduates awaiting degrees, and students who withdraw from school while a disciplinary matter is pending. Conduct that threatens the safety or security of the campus community, or substantially disrupts the functions or operation of the university is within the jurisdiction of this Article regardless of whether it occurs on or off campus. Nothing in this Code may conflict with Education Code section 66301 that prohibits disciplinary action against students based on behavior protected by the First Amendment.

Summary of Civil and Criminal Penalties for Violation of Federal Copyright Laws

As referenced above in the Standards for Student Conduct (15) (G) the penalties for copyright infringement include civil and criminal penalties in addition to university sanctions. Copyright infringement is the act of exercising, without permission or legal authority, one or more of the exclusive rights granted to the copyright owner under section 106 of the Copyright Act (Title 17 of the United States Code). These rights include the right to reproduce or distribute a copyrighted work. In the file-sharing context, downloading or uploading substantial parts of a copyrighted work without authority constitutes an infringement.

Penalties for copyright infringement include civil and criminal penalties. In general, anyone found liable for civil copyright infringement may be ordered to pay either actual damages or "statutory" damages affixed at not less than \$750 and not more than \$30,000 per work infringed. For "willful" infringement, a court may award up to \$150,000 per work infringed. A court can, in its discretion, also assess costs and attorneys' fees. For details, see Title 17, United States Code, Sections 504, 505.

Willful copyright infringement can also result in criminal penalties, including imprisonment of up to five years and fines of up to \$250,000 per offense.

For more information, please see the Web site of the U.S. Copyright Office at www.copyright.gov, especially their FAQ's at www.copyright.gov/help/faq.

Student Conduct Procedures

Executive Order 1073, Student Conduct Procedures, provides for appropriate notice and an opportunity to be heard before sanctions are imposed for a violation of the Standards for Student Conduct. Practices in disciplinary cases may vary in formality depending on the gravity of the offense and the sanctions which may be applied. For the full text of Executive Order 1073, Student Conduct Procedures, please see the website of the Office of Student Development and Judicial Affairs at <http://www20.csueastbay.edu/students/campus-life/student-life/sdja/>

California Code of Regulations Title 5, Section 41302 Disposition of Fees; Campus Emergency Executive Order 1073 Article VI. Interim Suspension

The President may impose an interim suspension pursuant to Title 5 Section 41302 where there is reasonable cause to believe that separation of a Student is necessary to protect the personal safety of persons within the University community or University Property, and to ensure the maintenance of order. During the period of an interim suspension, the Student charged may not, without prior written permission from the campus President enter any campus of the California State University other than to attend the hearing regarding the merits of his or her interim suspension.

The president may also restrict the Student's participation in University-related activities, including off-campus activities and/or participating in on-line classes, etc. Violation of any condition of interim suspension shall be grounds for expulsion. The full text of Executive Order 1073 can be accessed at <http://www.csueastbay.edu/sdja>.

Whistleblower Protection

Under the California Whistleblower Protection act, any employee or applicant for employment may make a protected disclosure of an improper government activity or any condition that may significantly threaten the health or safety of employees or the public to the State Auditor, CSU or CSUEB. The procedure for making such protected disclosures is set forth in the document titled "Reporting Procedures for Protected Disclosure of Improper Governmental Activities and/or Significant Threats to Health or Safety" (Executive Order 929) and can be viewed or downloaded at: <http://www.calstate.edu/eo/EO-929.pdf>. The CSUEB administrator responsible for receiving and investigating such disclosures is the Director of Equity and Diversity, Risk Management and Internal Control. In addition, under the Act, employees and applicants for employment are protected from retaliation from making such protected disclosures. The procedure for making a complaint of retaliation is set forth in the document titled "Revised Complaint Procedure for Allegations of Retaliation for Disclosure under the California Whistleblower Protection Act" (Executive Order 822) and can be viewed or downloaded at: <http://www.calstate.edu/eo/EO-822.pdf>. As with protected disclosures, Risk Management and Internal Control is responsible for receiving and investigating retaliation complaints.

Errata

Erratum to the Community Health Option, Health Sciences, B.S. in the Programs of Study Section:

- December 9, 2015 - **The following language has been deleted from the catalog:**
 - This option will prepare you for a national exam and potential certification as a Community Health Educator Specialist. *See Lower Division Core and Upper Division Core as outlined above in sections I and II.*

Erratum to the Economics Minor:

Upper Division elective course correction:

One elective course in Economics (Choose from the following):

- ECON/INDE 3140 - Engineering Economy
- ECON 3170 - History of Economic Thought
- ECON 3200 - Comparative Economic Systems
- ECON 3310 - Money, Banking, and Financial Intermediaries
- ECON 3370 - Public Sector Economics
- ECON 3375 - Public Choice: The Economics of Politics
- ECON 3500 - Urban Economics
- ECON 3555 - Economics of Innovation and Intellectual Property
- ECON 3560 - Economics of Information and Organizations
- ECON 3680 - Labor Economics
- ECON 3690 - Health Economics and Public Policy
- ECON 3999 - Issues in Economics
- ECON 4000 - Mathematical Economics
- ECON 4306 - Environmental Economics
- ECON 4315 - Monetary Theory
- ECON 4400 - Introduction to Econometrics
- ECON 4520 - Industrial Organization and Public Policy
- ECON 4590 - Selected Topics in Economic Analysis
- ECON 4700 - International Trade
- ECON 4705 - International Finance
- ECON 4710 - International Economic Development

Erratum to the Information Technology Management Minor:

The Upper Division (20 units) elective courses include the following correction:

- ITM 3060 - Information Technology Management Units: 4

Choice of four courses (16 units) permitted from the Information Technology Management option in the Business Administration major:

- ITM 4271 - Database Management and Applications Units: 4
- ITM 4272 - Information Technology and Telecommunication Systems Units: 4
- ITM 4273 - Business Intelligence Systems Units: 4
- ITM 4277 - Information Systems Development and Management Units: 4
- ITM 4278 - E-Business Systems Development Units: 4
- MGMT 3110 - Project Management Units: 4

Erratum to the following ACCT courses: Prerequisite correction as of September 23, 2015:

ACCT 6015: All CBE and University proficiencies, including the UWSR.

ACCT 6215: All CBE and University proficiencies, including the UWSR; All MBA Fundamental Courses.

Erratum to the following ECON courses: Prerequisite correction as of September 23, 2015:

ECON 6215: All CBE and University proficiencies, including the UWSR; All MBA Fundamental Courses.

Erratum to the following ENTR courses: Prerequisite correction as of September 23, 2015:

ENTR 6480: All Fundamental Courses.

ENTR 6485: All Fundamental Courses and ENTR 6480.

ENTR 6800: All CBE and University proficiencies, including the UWSR, All MBA Fundamental Courses, minimum of 36 units of core and/or option courses, and application for graduation on file.

Erratum to the following ITM courses: Prerequisite correction as of September 23, 2015:

ITM 6015: All CBE and University proficiencies, including the UWSR.

ITM 6130: All Fundamental Courses.

ITM 6271: All Fundamental Courses.

ITM 6273: ITM 6015 and MGMT 6015.

Erratum to the following FIN courses: Prerequisite correction as of September 23, 2015:

FIN 6215: All CBE and University proficiencies, including the UWSR; All MBA Fundamental Courses.

FIN 6305: All Fundamental Courses and FIN 6215.

FIN 6310: All Fundamental Courses and FIN 6215.

FIN 6315: All Fundamental Courses and FIN 6215.

FIN 6320: All Fundamental Courses and FIN 6215.

FIN 6325: All Fundamental Courses and FIN 6215.

FIN 6375: All Fundamental Courses and FIN 6215.

Erratum to the following MKTG courses: Prerequisite correction as of September 23, 2015:

MKTG 6120: All CBE and University proficiencies, including the UWSR.

MKTG 6215: All CBE and University proficiencies, including the UWSR; All MBA Fundamental Courses.

MKTG 6401: All Fundamental Courses and MKTG 6215.

MKTG 6410: All Fundamental Courses and MKTG 6215.

MKTG 6411: All Fundamental Courses and MKTG 6215.

MKTG 6413: All Fundamental Courses and MKTG 6215.

MKTG 6414: MKTG 3401 or 6005; MKTG 6401.

MKTG 6450: All Fundamental Courses and MKTG 6215.

MKTG 6470: All Fundamental Courses and MKTG 6215.

Erratum to the following MGMT courses: Prerequisite correction as of September 23, 2015:

MGMT 6015: All CBE and University proficiencies, including the UWSR.

MGMT 6115: All Fundamental Courses and MGMT 6220.

MGMT 6120: All CBE and University proficiencies, including the UWSR.

MGMT 6130: All Fundamental Courses and MGMT 6220.

MGMT 6141: All Fundamental Courses and MGMT 6220.

MGMT 6145: All Fundamental Courses and MGMT 6220.

MGMT 6150: All Fundamental Courses and MGMT 6220.

MGMT 6155: All Fundamental Courses and MGMT 6220.

MGMT 6215: All CBE and University proficiencies, including the UWSR; All MBA Fundamental Courses.

MGMT 6220: All CBE and University proficiencies, including the UWSR; All MBA Fundamental Courses.

MGMT 6225: All CBE and University proficiencies, including the UWSR; All MBA Fundamental Courses

MGMT 6285: ITM 6271 or instructor's consent.

MGMT 6420: All Fundamental Courses.

MGMT 6440: All Fundamental Courses.

MGMT 6460: All Fundamental Courses.

MGMT 6470: All Fundamental Courses.

MGMT 6520: All Fundamental Courses.

MGMT 6560: All Fundamental Courses.

MGMT 6612: All Fundamental Courses.

MGMT 6613: All Fundamental Courses.

MGMT 6615: ACCT 6015, ITM 6015, MGMT 6015

MGMT 6618: All Fundamental Courses.

MGMT 6622: MGMT 6612 or instructor's consent.

MGMT 6675: All Fundamental Courses.

MGMT 6800: All CBE and University proficiencies, including the UWSR, All MBA Fundamental Courses, minimum of 36 units of core and/or option courses, and application for graduation on file.

Erratum to the M.S. Engineering Management program: Change in "*Prerequisites for "Classified Graduate" Status*" section:

ACCT 2251 (replaces ACCT 2253 as prerequisite)

ENGR 3140 / INDE 3140

STAT 3601 / INDE 3601

-or- STAT 5601 / ENGR 5601

Erratum to the M.S. Engineering Management. Change in core options:

ENGR 6800 Research in Engineering Management; ENGR 6899 Project; or pass the comprehensive examination and complete an additional 4-unit elective course.