Notice: The information contained in this catalog describes the anticipated programs, courses, rules, regulations, and fees of Diablo Valley College. These are subject to change at any time. We disclaim liability for any unintended errors in this publication.
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# Table of contents

**Introduction** .................................................................................................................. 7
An overview of programs
  - Getting the most out of DVC
  - Admission
  - How to apply
  - Fees, costs and refunds
  - Financial assistance
  - Registering for courses
  - Student resources
  - Extracurricular activities
  - More educational programs
  - College policies and procedures
  - College and student policies

**Transfer information** ................................................................................................. 50
  - CSU general education requirements
  - Intersegmental General Education Transfer Curriculum, IGETC
  - California articulation number (CAN)

**Requirements for general education, associate degrees and certificates** .......... 62
  - DVC general education requirements
  - DVC associate degrees
  - Career/Technical certificate programs
  - CCCCD certificate programs and associate degrees

**Program and course descriptions** ............................................................................... 73
  - Program and course index

**Faculty** ......................................................................................................................... 258
**Emeriti** .......................................................................................................................... 265

**Index** ............................................................................................................................ 267

**Telephone directory** ................................................................................................... 270

**Campus map** ............................................................................................................... 272
“I decided to change career paths and pursue my true passion: education. I needed to complete several prerequisites before I could apply to graduate school so I enrolled at DVC. I was absolutely delighted with my instructors and courses! In fact, the overall quality of instruction at DVC matched what I had experienced at the university level! Now that I work with high school students daily, I never hesitate to remind them of the terrific resource we have right here. DVC is a great choice for students beginning a post secondary education as well as those embarking in a new direction!”

Jan Carlson
Associate Principal
Acalanes High School, Lafayette
# Introduction

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>8</td>
</tr>
<tr>
<td>An overview of programs</td>
<td>10</td>
</tr>
<tr>
<td>Getting the most out of DVC</td>
<td>11</td>
</tr>
<tr>
<td>Admission</td>
<td>13</td>
</tr>
<tr>
<td>How to apply</td>
<td>13</td>
</tr>
<tr>
<td>Fees, costs and refunds</td>
<td>14</td>
</tr>
<tr>
<td>Financial assistance</td>
<td>15</td>
</tr>
<tr>
<td>Registering for courses</td>
<td>18</td>
</tr>
<tr>
<td>Student resources</td>
<td>20</td>
</tr>
<tr>
<td>Extracurricular activities</td>
<td>27</td>
</tr>
<tr>
<td>More educational programs</td>
<td>29</td>
</tr>
<tr>
<td>College policies and procedures</td>
<td>31</td>
</tr>
<tr>
<td>College and student policies</td>
<td>37</td>
</tr>
</tbody>
</table>
Introduction

District and college history

The Contra Costa Community College District first opened its doors in 1949. It is the second oldest and eighth largest multi-college community college district in California. CCCD serves a population of over 1,000,000 people, and its boundaries encompass all but 48 of the 734 square mile land area of Contra Costa County. The district reaches from San Francisco Bay on the west to the Sacramento-San Joaquin Delta and Byron on the east and from the Carquinez Strait and Suisun Bay on the north to Alameda County on the south.

The district is made up of three colleges: Diablo Valley College in Pleasant Hill, which also has a campus in San Ramon; Contra Costa College in San Pablo; and Los Medanos College in Pittsburg, which also has a center in Brentwood. The District Office is located in historic downtown Martinez.

The publicly supported Contra Costa Community College District offers students low-cost access to quality higher education through a variety of programs including associate degrees, transfer credit to four-year colleges, vocational training, developmental education, English as a second language, economic development services, community service, and lifelong learning opportunities.

Formerly known as East Contra Costa Junior College, DVC officially began offering courses in 1949 in some of the most unlikely sites: high schools, banks, churches, and even an old army camp. On October 5, 1950, the College Board of Trustees purchased a piece of land for the college’s permanent home at a cost of $172,500. Originally home to the Costanoan Indians, the land was granted to William Welch in 1844 by the Mexican government. The parcel became part of the huge Rancho Las Juglas, which then included northwestern Walnut Creek, all of Pleasant Hill, and the northeastern half of Martinez. After World War II, the land was subdivided into housing tracts, one of which was purchased for the new college.

The college moved to its present site in 1952, and began holding classes in ten steel buildings acquired from the government for $45 each. The name Diablo Valley College was adopted in 1958.

For over 50 years, DVC has maintained a well-defined vision of its future. Central to this vision has always been a deep commitment to the needs of students -- a commitment that continues to be honored today.

The 1960s and 1970s were a period of rapid expansion as the student body grew and the campus developed. In the 1980s the college established a satellite center, the San Ramon Valley Campus, to serve the needs of students in South County. During that same time, a study abroad program and an international student program were created. The 1990s saw increased use of technology to support instruction and a greater diversity of course selections to serve student needs. The college also developed long-term economic partnerships with local businesses. Now well into the 21st century, DVC’s student body reflects the growing multiculturalism and diversity found in California.

DVC’s main campus is located off Interstate 680 in Pleasant Hill on one hundred acres of gently rolling hills in view of Mt. Diablo, a northern California landmark. It is the college of choice for many students from the private and public high schools in nearby Martinez, Mt. Diablo, San Ramon and Acalanes school districts, as well as neighboring geographic areas. A new San Ramon Valley Campus in Dougherty Valley is currently under construction and is scheduled to open its doors to students in January of 2007. DVC employs more than 1,100 faculty and staff, and serves nearly 24,000 students each semester. Among community colleges, DVC has one of the highest rates of transfer to the University of California and the California State University.
Philosophy

The primary objective of Diablo Valley College is to foster the development, growth and success of each of its students. At DVC, student learning is paramount and comprises not simply the transference of knowledge and skills, but also a process of intellectual, artistic, political, ethical, physical and spiritual exploration. At DVC, such learning is the mutual responsibility of both the college and the student.

The college recognizes the dignity and intrinsic worth of the individual and will make every effort to design programs to meet individual needs, interests and capacities. A broad range of educational approaches and support services is necessary in order to ensure that each student achieves his or her potential.

In fulfilling these objectives and principles, the college affirms its intention:

• to provide the highest possible level of education and counseling in order to help students develop and realize their goals;
• to provide the highest possible level of access to a student body that reflects the cultural and socio-economic diversity of our community;
• to provide students with opportunities for the development of values, ethical behavior, aesthetic appreciation, and a sense of civic responsibility;
• to provide students with opportunities for social and personal growth;
• to enhance self-esteem and a sense of individual responsibility;
• to provide a campus climate that encourages tolerance, mutual respect, civility, and the free and open exchange of ideas;
• to instill an appreciation for the values and contributions of other cultures and to foster a global and international perspective among all students.

The college continually seeks and supports a dedicated, highly qualified staff that is diverse in terms of cultural background, ethnicity, and intellectual perspective and that is committed to fostering a climate of academic freedom and collegiality. The college encourages and supports professional development for all staff and all share in the responsibility for student outcomes.

Diablo Valley College affirms its responsibility to address the diverse needs of the communities it serves and to provide leadership in the civic, cultural, and economic development of the region.

Mission

In implementing its philosophy, Diablo Valley College engages in a wide variety of activities. However, four primary missions constitute the critical functions of the college:

1. Transfer

The college ensures access to a baccalaureate degree for all members of the community, regardless of their circumstances or prior academic record, by providing the full range of freshman and sophomore level courses necessary for transfer. These courses are of sufficient breadth, depth and rigor to ensure that transfer students are as well prepared to succeed in upper division work as those who complete their first two years at a four-year college or university. The college also provides a transfer center, counseling and academic planning services, timely and accurate information about transfer requirements, and the necessary articulation agreements to facilitate the transfer process. The college faculty and staff are dedicated to the active identification, encouragement and support of students who have the desire and ability to pursue a baccalaureate degree.

2. Workforce development

In order to ensure a well-trained work force, the college provides a wide variety of career/technical education programs and general education courses designed to prepare students for new careers, career changes and career advancement. The college also provides students with access to the support services and career development services necessary to help them establish and fulfill educational plans appropriate to their career goals. The college’s career/technical education programs are responsive to the changing needs of the business community and of the regional economy. The programs are focused not only on the educational needs of individuals but on the workforce development needs of the community as well.

3. Economic development

In addition to providing strong occupational programs, the college supports the economic development of the region through its leadership in planning, its encouragement of partnerships for economic growth, and the provision of contract-based training to meet the needs of business and the community. The aim of the college’s economic development efforts is to ensure that the region has the planning, development and training capacity necessary to attract and retain business and to maintain the region’s economic vitality.

4. Pre-collegiate preparation

The college ensures meaningful access to its collegiate programs by providing a broad range of pre-collegiate courses designed to develop the basic skills necessary to succeed in college level courses. The college is committed to offering courses responsive to student
needs and to individual learning styles. The college also is committed to providing the comprehensive student support services necessary to help students overcome their educational limitations. The aim of the pre-collegiate program is to empower students to become confident and independent learners, to recognize and build on individual strengths, and to encourage students’ further education.

In addition to these primary missions, the college acknowledges and honors its traditional role as a center for lifelong learning by providing courses, events and activities that promote lifelong learning and enrich the community’s cultural, intellectual and recreational environment.

Faculty commitment to students
DVC’s faculty is dedicated to meeting the educational needs of its community, in accordance with the purposes and regulations that appear in the Education Code of California. The following statement summarizes the faculty’s beliefs and concepts about the purpose of this college:

We believe that one of our leadership responsibilities is to identify the educational needs of our community. Our students come to us with a variety of aspirations, interests, and abilities, and each brings to DVC a certain level of maturity and preparation. We recognize that the student must decide which educational program to pursue, but we also feel obliged to help each student make realistic choices and to develop the skills and proficiencies appropriate to college work.

We believe that a good education is fundamental to the democratic processes. Therefore, we value the unique contributions of each student and we believe all of DVC’s educational programs are of equal importance. We conceive the heart of the school to be the student and the student to be the whole human being — the sum of his/her feelings, beliefs, thoughts, and attitudes, as well as his/her physical, emotional, and intellectual needs. Hence, we encourage self-reliance, self-direction, intelligent use of the elements of our broad cultural heritage, and a genuine and critical quest for truth.

We believe that to teach is to help people grow in many different ways, and that learning is an active, lifelong process of thinking, feeling, and doing. We believe that an excellent college education motivates students to learn well and gives students the ability to transfer and derive meaning from their learning. Therefore, we strive for a balance between specialization and generalization when organizing and presenting subject matter.

Finally, we believe that close student-faculty relationships both contribute to learning and make it more enjoyable.

Shared governance
Shared governance, the college’s decision-making process, involves many members of the DVC community. Representative students, faculty, classified, and management staff confer with each other in committees. These representative committees recommend a variety of educational policies to guide the institution and district.

This involvement represents a continuing response to the challenge of recognizing diverse perspectives and incorporating their dynamic influences into the college’s decision-making process.

An overview of programs
DVC’s educational programs satisfy the needs of a diverse student body. DVC offers these programs on the Pleasant Hill campus; at the San Ramon Valley Campus; and at various locations throughout the district.

DVC day programs
A full selection of courses is offered during the day. There are courses that run for an entire term and also short-term courses and workshops.

DVC evening and weekend programs
Many full-term and short-term courses are available in the evenings and on the weekends, offering students flexibility in their scheduling. Students can earn an associate degree or satisfy general education transfer requirements to UC and CSU by attending only evening and weekend courses. Students can also complete the requirements for many certificates of achievement at night. See the schedule of courses for a listing of those occupational programs that may be completed during evenings and/or weekends.
Online and hybrid courses
DVC and SRVC offer a growing selection of online and hybrid courses, making higher education more accessible to a larger number of students. Online courses are taught almost exclusively through the Internet requiring students to attend very few face-to-face meetings. Hybrid courses use a combination of class meetings and online instruction. To find out more about online courses, visit www.dvc.edu/online.

DVC summer programs
Full and short-term courses are available during summer days and evenings, offering students the opportunity to complete a course for a full term’s credit in several convenient, condensed formats. See summer schedule.

Other campus and center locations
- San Ramon Valley Campus
  The San Ramon Valley Campus (SRVC) is DVC’s campus in San Ramon. Formerly known as the Center for Higher Education (CHE), this fast-growing center currently enrolls nearly 5,000 students each semester. A new San Ramon Valley Campus in Dougherty Valley is currently under construction and is scheduled to open its doors to students in January of 2007.

  Many students choose to take all of their DVC courses at the San Ramon Valley Campus, while others split their class time between SRVC and the Pleasant Hill campus. Located in a modern office complex in San Ramon, SRVC provides an opportunity for DVC students to receive the same excellent instruction in an intimate setting.

  The San Ramon Valley Campus offers a full complement of general education courses leading to an associate degree and/or transfer to a four-year institution. In addition, SRVC offers short-format Computer Information Systems (CIS) workshops in the latest software and network technology areas.

  Students have access to many of the same services available at DVC’s main campus including admissions, assessment, bookstore, computer labs, counseling, disabled student services, financial aid and scholarship information, job postings, math labs, library, orientation classes, transfer workshops, and other student service information and programs.

  SRVC is conveniently located at 3150 Crow Canyon Place (off Crow Canyon Road at 680), in San Ramon. The telephone number is listed in the telephone directory in the back of the catalog. SRVC’s website is: www.srvc.net.

- CSU East Bay, Concord (formerly CSU Hayward)
  DVC offers courses at CSUEB’s Concord campus. Students have the opportunity to study on a four-year college campus and enjoy the beautiful facilities, while reaping the benefits of a community college environment — lower fees, smaller classes, and great instructors.

  Students with less than one term of college work have another advantage. They may apply for dual admission and be admitted to both DVC and CSUEB at the same time, thus gaining the privileges of any CSU student while taking DVC courses. For information about dual admissions, please contact the DVC counseling department.

  The DVC courses at CSUEB are offered in 15-week semester blocks. Most courses are offered in a Monday/Wednesday or a Tuesday/Thursday format. Please see the schedule of courses for specific offerings.

  CSUEB is located at 4700 Ygnacio Valley Road in Concord. The telephone number is listed in the telephone directory in the back of the catalog. To view a current list of DVC courses being offered at CSUEB, please visit: www.dvc.edu and initiate a search for short-term courses.

- Walnut Creek Center
  DVC offers courses at the Walnut Creek Center located at 1250 Arroyo Way, Walnut Creek. Please see the schedule of courses for more information.

Getting the most out of DVC
Setting educational and career goals
Many students enter DVC with clearly defined educational or career goals, while many others are still exploring their options. DVC is a place where students can investigate their interests and abilities, and learn how to set goals.

  Students are encouraged to use DVC’s counseling, assessment, career and employment services to help set and attain their educational and career goals. Students are also encouraged to build relationships with faculty who are in their areas of interest. They can provide students with the information, support, and guidance to help them reach their goals.
The most important service new students should take advantage of when entering DVC is the matriculation program. This program, described below, is designed to help students succeed. Research shows that students who have participated in the matriculation program have far greater success in course work than students who have not participated.

Continuing students should meet with a counselor each term to update their educational plans and to get advice about which courses will best fulfill their plans.

**Matriculation**

Matriculation is a process that helps new students learn about the college and themselves. Through this process, students develop their educational plans and select the most appropriate courses for their interests and abilities. All new students are expected to participate in matriculation. Although matriculation is voluntary, new students who participate receive a higher priority registration appointment than those who do not.

Students begin the matriculation process when they hand in their application for admission. At this point, students sign up for Counseling 105 orientation. Once they have completed assessment and Counseling 105, they are eligible for a priority registration appointment.

New students may receive an earlier registration appointment without matriculating if they have an associate or higher degree, are enrolling in six units or less, or are enrolling for one of the following reasons:

- to learn or update job skills,
- to maintain certificate or license,
- for special personal interest.

**Assessment**

When students submit their application for admission, they are asked to have their English and math skills assessed. The assessment results indicate a student’s skill level in these subjects. This information helps students to select courses in which they are most likely to succeed. In addition to assessment information, students also base their course choices on their previous grades, job experience, and personal level of confidence. Assessment sessions are offered throughout the year and take about two and a half hours. ESL and chemistry assessment are also available.

The Assessment Center entrance is located on the Library side of the Technical Education Building (TE 107).

**Exemptions:**

New students need not take the English assessment if they have received a “C” grade or better in a college course equivalent to English 122 - Freshman English: Composition and Reading.

New students need not take the math assessment if they have received a “C” grade or better in a college or high school course equivalent to Math 110 - Elementary Algebra.

For more information, contact the Assessment Center or Admissions Office.

**Orientation and advising**

Once students complete assessment, they are ready for the orientation and advisement course, Counseling 105. This course consists of two three-hour class sessions. The class is taught by a counselor who provides information about DVC academic and vocational programs, special programs, support services, and career opportunities. The counselor also discusses general education patterns and transfer requirements, degree and certificate requirements, grading, and add/drop policies.

In Counseling 105, students also meet individually or in small groups with a counselor to plan their first-term courses and to begin working on a larger educational plan. The student and counselor review the student’s goals, prior course work, and assessment test results.

The counselor advises students regarding course selection and points out specific support services that might be of help to the student. Students are encouraged to check on their progress toward their goals by meeting each term with a counselor.
Admission

Who is eligible for admission?

A student is eligible for admission if he or she:

• has graduated from high school, or
• is 18 years of age or older and no longer in high school, or
• has passed the State of California Certificate of Proficiency Test or the General Educational Development Test (GED).

California residence status

California residence status is determined by the Admissions Office. A student is eligible for residency if he or she has lived in California for at least one year prior to the beginning of the term in which he or she wishes to enroll, and can show evidence of California residency.

Non-residence status

Students who are nonresidents must pay a non-resident tuition fee in addition to the other usual college fees. For more information, see “fees, costs, and refunds.”

International students

Diablo Valley College is committed to global education and is a leader in advancing international education in the United States. Approximately 1,000 international students representing 80 countries attend DVC yearly. The diverse cultures of these students help to enrich our campus community. International students interested in applying to DVC should log on to www.dvc.edu/isas to download an international student application. International students are required to comply with immigration regulations and must submit supporting documents for admission purposes.

The application includes a checklist to ensure that students understand what they need to submit to be admitted as an international student to DVC. International students must pay the international student rate for courses in addition to the usual college fees.

For international students applying from within the United States, the deadline for fall semester admission is July 15. For international students applying from outside the United States, the deadline for fall semester admission is July 1. The spring admission deadline for all international students is December 1. All international students are required by law to report to the designated school official at the ISAS office when they arrive on campus, transfer institutions, or leave the country.

Transferring to DVC

DVC welcomes transfer students from other colleges. Transfer students should follow our general application procedures listed in the following section.

Transfer students should send official transcripts of their prior college work to the Admissions Office.

General applications

New and returning students

All students who are new or who have been absent for one term, need to have an application on file with the Admissions Office.

Transcripts

Students should send official transcripts to the Admissions Office to provide proof of prerequisites. These transcripts become part of the student’s official file and will not be released to the student or forwarded to other colleges.
Programs requiring special application

Dental programs
Students who wish to enter the dental hygiene program must meet the prerequisites prior to enrollment.

Fees, costs and refunds

Enrollment fees*
- Tuition is $26 per unit for California residents.
- Tuition is $163 per unit, plus $26 enrollment fee, for U.S. citizens or permanent residents who are not California residents.
- Tuition is $177 per unit, plus $26 per unit enrollment fee, for students who are not U.S. citizens.

Enrollment fees are due at the time of registration.
*All fees are subject to change

Enrollment fee and non-resident tuition refunds
Our refund policy complies with and is based upon Title 5 law and the Education Code. A detailed refund policy is posted at the Cashier’s Office.

For a full term-length course
In order to obtain a refund, students must officially drop units within the first two weeks of a term.

For short-term courses and summer-term courses
In order to obtain a refund, students must officially drop units within the first 10% of the length of the course.

Parking permit refunds
In order to obtain a refund, students must:
- officially drop all units within the first two weeks of the term.
- return the parking permit to the cashier’s office.

Course materials fees
In order to obtain a refund, students must officially drop the course within the first two weeks of the term length course. Refunds can be requested at the Cashier’s Office.

Other fees and expenses

Books, supplies, and course material fees
Students must purchase all books and many of the supplies required by their courses. When possible, the Book Center sells used books at reduced prices. The average cost for books is $250 - $350 per term for a full-time student.

DVC Connect Card & ASDVC sticker
The DVC connect card is provided free to all students and is required for library checkout and identification purposes. It is obtainable at the student union, library and SRVC. You can purchase an associated student activity and discount sticker for $7 per term. The benefits of purchasing a sticker include a five percent discount on textbooks and other items from the DVC Book Center, free admission to DVC athletic events, and more. The $7 fee helps to fund student activities including films, concerts, dances, special athletic events, and campus enhancement. Fees are non-refundable.

Field trip fees
Sometimes students must provide their own transportation for field trips. Students are expected to pay entrance fees for theaters, galleries, and other activities. Instructors will give alternate assignments to students who cannot afford the cost of a field trip.

Parking fees
On the Pleasant Hill campus during the fall and spring semesters, parking permits are $2 per day for short-term parking, $35 per term for automobiles, $20 per term for motorcycles and mopeds, and $1 for optional permit carriers. Financial aid students are eligible for a discounted parking permit for $20. DVC permits are only required from Monday - morning until 5 p.m. on Friday and are valid at LMC, CCC & SRVC. During the summer, parking permits are $2 per day for short-term parking, $20 per term for automobiles, and $10 for motorcycles and mopeds.

Enrollment fees*
- Tuition is $26 per unit for California residents.
- Tuition is $163 per unit, plus $26 enrollment fee, for U.S. citizens or permanent residents who are not California residents.
- Tuition is $177 per unit, plus $26 per unit enrollment fee, for students who are not U.S. citizens.

*All fees are subject to change
DVC parking permits are valid at SRVC. Alternatively, students taking one or more term-length courses only at SRVC may purchase a special permit for $15. Those taking a short-term CIS workshop at SRVC may purchase a special permit for $1.

If you are enrolled in a DVC or LMC course at CSUEB, you can obtain a free parking permit for that facility when you show either your DVC or LMC permit. Daily parking is also available at CSUEB and costs $1.50 per day.

Parking violations
Fines range from $35 for parking in a regular space without a permit, to over $275 for parking in a space reserved for the handicapped.

Schedule of courses and catalog
Catalogs and course schedules may be purchased at the Book Center.

Student debts to the college
We expect students to clear their financial debts promptly. Students who owe DVC money for overdue library books, returned checks, or other debts will not be allowed to use college services (such as registering for courses or obtaining official transcripts) until their debts are paid.

Student union fee
The amount of this fee depends on the number of course units the student is enrolled in (maximum: $10 per year). Fees help finance maintenance of the Student Union Building.

Telephone registration fee
The $2 fee per term is for unlimited use of the telephone registration system. There is no fee for online enrollment. There is no fee to drop a course by telephone.

 Transcript fees
Students receive two official transcripts within the district free of charge. Additional copies are $5 each, payable in advance. Your signature is required to release your transcripts. We will accept your request by mail or fax. Fax requests must also include your VISA or MC number and expiration date. Please allow 7-10 working days for processing. Express service is also available (1 hour service) for a cost of $10 per transcript.

Verification of enrollment fees
Students can receive a free verification of enrollment through Web Advisor (available 24 hours a day, seven days a week.) Verifications requested through the Admissions Office will be assessed a $2 fee for each request processed after the first two free copies have been issued. All requests must be made in writing. Please allow 7-10 working days for processing. Express service is available (1 hour service) for a cost of $5 per verification.

Voluntary student medical insurance
This insurance covers serious illness or injury and the hospital expenses involved. Various low-cost plans are available for students and their dependents. Brochures are available in the Admissions Office, Student Life Office, or from the dean of student life. Applications must be completed within 30 days after classes start. Students must carry at least six units of course work to be eligible.

Students will find many opportunities to receive financial assistance at DVC. They should go to the Financial Aid Office, EOPS, or Scholarship Office for more information.

Financial aid
Diablo Valley College has a broad range of financial aid programs. Over nine million dollars in financial aid is awarded to eligible students annually and many students receive a Board of Governors enrollment fee waiver. Interested students should visit the Financial Aid Office, located in the Business Education Building.

Grants
Board of Governors’ waiver
This is a California state program that waives enrollment fees. This waiver does not have to be repaid.

Eligibility
Students must be residents of California, meet income standards, or demonstrate financial need as determined by the federal financial aid application.

How to apply
Fill out a Free Application for Federal Student Aid (FAFSA) form available from the Financial Aid Office and...
send to the Department of Education in the envelope supplied OR fill out the online application at www.fafsa.ed.gov. You can also complete a Board of Governor’s Waiver (BOGW) application form available from the Financial Aid Office. The BOGW form must be turned into the Financial Aid Office for processing.

**Federal PELL grant**

Students may receive a maximum grant of $4,050 per year. This grant does not have to be repaid.

**Eligibility**

Students must demonstrate financial need as determined by the federal financial aid application and comply with the college’s financial aid Satisfactory Academic Progress policy.

**How to apply**

Fill out a Free Application for Federal Student Aid (FAFSA) available in the Financial Aid Office or online at www.fafsa.ed.gov.

**Notification**

Eligible students are mailed an award letter.

**Federal Supplemental Educational Opportunity Grant (FSEOG)**

These funds are limited. This grant does not have to be repaid.

**Eligibility**

Students must be eligible for a PELL grant and demonstrate a need for additional money to meet the cost of their education. Students must comply with the college’s financial aid Satisfactory Academic Progress policy.

**How to apply**

Fill out a Free Application for Federal Student Aid (FAFSA) available from the Financial Aid Office or online at www.fafsa.ed.gov. Meeting the priority deadline of March 2 means that students will have priority for receiving the grant; however, applications are accepted as long as funds are available.

**Notification**

Eligible students are mailed an award letter.

**Cal Grant**

There are three main types of Cal Grants (A, B and C). Cal Grant A can be used for fees and tuition at public and private colleges (not Community Colleges). Cal Grant B provides low-income students with a living allowance and assistance with tuition and fees. The maximum a Community College student can receive in one year through Cal Grant B is $1,551. Cal Grant C helps pay tuition and training costs for vocational courses, to a maximum of $576 per year.

**Eligibility**

Students must be residents of California, demonstrate financial need, and maintain certain academic standards.

**How to apply**

Fill out a Free Application for Federal Student Aid (FAFSA) and submit a certified GPA Verification Form to the state of California. The GPA Verification Form must be completed and postmarked by March 2 and/or September 2. Both forms are available in the Financial Aid Office.

**Notification**

Eligible students are mailed award letters from the state of California and the college.

**Work-Study**

**Federal Work-Study (FWS)**

Students participating in the Federal Work-Study Program work part-time (not more than 20 hours per week) to help meet their educational costs. Work-study jobs are available at a variety of on-campus and off-campus locations. The funds are limited and administered through the Career and Employment Service Center.

**Eligibility**

Students must demonstrate the need for additional funds to meet the cost of education. They must also comply with the college’s financial aid satisfactory academic progress policy.

**How to apply**

Fill out a Free Application for Federal Student Aid (FAFSA) available in the Financial Aid Office or online at www.fafsa.ed.gov. Meeting the March 2 priority deadline means that students will have priority for receiving federal work-study funds; however, applications are accepted as long as funds are available. In addition, students must file a job placement application in the Career and Employment Services Center. Making an appointment is suggested. See the telephone directory in the back of the catalog.

**Notification**

Students are notified by the Financial Aid Office.

**Loans**

**Federal loans**

There are federal loans available to students and parents, which usually have a low interest rate. For specific information contact the Financial Aid Office.
Eligibility
Students must demonstrate financial need as determined by the federal financial aid application (FAFSA), meet federal criteria, and comply with the college's financial aid Satisfactory Academic Progress policy. Loans must be repaid, therefore, it is recommended that students use all other possible resources first and borrow only when it is absolutely necessary.

How to apply
Fill out a Free Application for Federal Student Aid (FAFSA); and a loan request packet. Loans are approved on a case-by-case basis.

Notification
Students are notified by the Financial Aid Office.

Other aid and benefits

Child Development Training Consortium
Financial aid is also available for students preparing for a career in early childhood education. Partial reimbursement for tuition and textbook costs is available through the Child Development Training Consortium. Applications and further information can be obtained by contacting the family life department on campus. See the telephone directory in the back of the catalog.

Scholarships

The DVC scholarship program
High school students entering Diablo Valley College, continuing DVC students, and students transferring to four-year colleges and universities will find many opportunities to compete for scholarships. These scholarships have been established for DVC students by individual sponsors, local, state, and national organizations. Call the Scholarship Program Office for more information. See the telephone directory in the back of the catalog.

Eligibility
Scholarship awards are based on a variety of criteria. Some of the major areas of consideration are grade point average, financial need, and community service experience. Scholarships are merit-based and the majority of awards require that students have a minimum cumulative grade point average of 3.0 for consideration.

Deadline for applying
Applications become available during the fall term. The filing deadline is generally in early February in order for the student to receive a scholarship for the next academic year.

How to apply
Complete a Diablo Valley College Scholarship Program application. Students must also provide documents that support their application as identified in the application form.

Notification
Scholarship award letters will be mailed to recipients from March to late April. The letter will specify the scholarship award amount and how the award funds will be disbursed. Students who are not awarded scholarships will be notified in early May.

Other scholarship opportunities
Numerous additional scholarship opportunities are available from October through April of each year. Check the scholarship literature display rack in the lobby of the Financial Aid Office and the Scholarship Office in the AB Building on a regular basis during the filing period. Deadlines vary.

Servicemen's Opportunity College
The Office of Private Postsecondary Education has designated DVC as a Servicemen’s Opportunity College, which means persons who are currently members of the armed forces may receive benefits that will help pay their college expenses.

Note: Some of our courses, such as non-degree courses, and some remedial courses have not been approved by the Veterans Administration and are not covered by veteran’s benefits or servicemen’s benefits.

Veteran’s benefits

Eligibility
Various federal and state agencies determine eligibility for veteran’s benefits, depending on whether the student is a veteran or a dependent of a deceased veteran. To receive veteran’s benefits, the student must carry a course load of at least six units and maintain a grade point average of at least 2.0. To receive full benefits, the student must carry at least 12 units.

How to apply
Interested students should speak with a staff member in the Admissions Office when they pick up an application for admission or contact the Department of Veteran’s Affairs at (925) 313-1481 or (800) 827-1000 or visit the website at www.va.gov.
Vocational rehabilitation aid
For students who are considered by the State of California to have a condition that interferes with their ability to find and keep a job, the State Department of Rehabilitation provides financial assistance with college fees, books and supplies, academic tutoring, and other school-related expenses. The program at DVC also includes personal counseling and services that will help the student prepare for and find employment.

Eligibility
Students who have a physical or mental disability that interferes with their ability to work are eligible for vocational rehabilitation aid.

How to apply
Contact the Counseling Center to make an appointment with the rehabilitation counselor. The telephone number is listed in the telephone directory in the back of the catalog.
Walk-in registration
Students registering in person should decide which courses to take and complete a Schedule Request Form and application if necessary. Students should have alternative courses selected, in case their first choice classes are no longer available. Students should also be prepared to pay their fees when they register. All fees are due at the time of registration. Walk-in registration dates are listed in the schedule of courses.

Online and telephone registration
Students may register online or by telephone on or after their registration appointment date and up to the day before the class begins. Students may also drop courses online or by telephone throughout the term prior to the deadline to withdraw. Instructions for online and telephone registration are included in the schedule of courses.

Special admit students
(concurrent enrollment)

High school students
High school students may enroll as special admit students in courses with the permission of their principal and parent. These students must submit a DVC application, a DVC special admission recommendation form, and pay the required fees when they register. Enrollment fees only are waived if the student is enrolled in fewer than 12 units. Juniors and seniors are eligible to register online or by telephone if all required forms are on file prior to their registration appointment. Students younger than 16 must also have approval of the DVC instructor before they are allowed to register.

Four-year colleges
DVC’s concurrent enrollment program allows students to take some of their courses at the University of California, Berkeley, the California State University East Bay, Concord or Mills College. Contact the Counseling Center for more information and to obtain the appropriate forms.

Unit limits per term
In fall or spring term, a full-time course load is considered to be at least 12 units. See course work and units section.

Veterans must carry a course load of at least 12 units in order to receive full veteran’s benefits. International students must also carry at least 12 units each semester to maintain their student visa status.

Adding courses before instruction begins
Students who wish to add courses before the class begins may do so until midnight the day before the class begins.

Adding courses after instruction begins

Late Add Codes
The late add code is a 4-digit number that is given to students by the instructor on the first class meeting. Students must register by telephone if they are registering by late add code. Late add codes are listed on the instructor’s class roster. The late add code will expire at midnight of the last day to add the course.

Students who wish to add courses during the first week of instruction should first check Web Advisor for openings. If there is space available and the class has not started, students may register online or by telephone until midnight the day before the class begins. Or the student may go to the class to get the instructor’s signature. Return the signed schedule request form to the Admissions Office, and pay all fees to enroll in the courses.

Dropping courses

Student-initiated drop
Students are responsible for officially dropping courses before the deadline. Non-attendance or non-payment of a course will not remove you from enrollment and will not remove your responsibility to pay the registration fees. Even if an instructor promises to drop a student, the student is responsible for officially dropping the course. (The drop deadline for term-length courses is printed in the schedule of courses. Short-term courses must be dropped before 75 percent of the course time has elapsed.)

Students who do not officially drop a course may receive an “F” for the term. Add/drop forms are available in the Admissions Office. To officially drop a course, students must either submit a Schedule Request Form to the Admissions Office, or use the online or telephone registration systems.

If students drop online or by telephone they must ensure the course has been dropped from their records by checking their schedule.

If students drop a course before 25 percent of the instruction time has elapsed, no grade will appear on their transcript at the end of the term. If students drop a course after the 25 percent point (but before 75 percent of the instruction time has elapsed), they will receive a “W” on their transcript. “W” grades are not computed in a student’s grade point average; however, these grades may affect a student’s academic standing. Please see the “academic policy” section on progress probation and dismissal.

Instructor’s withdrawal option
Students who miss the first meeting of the course may be dropped by the instructor. Any student who is absent the equivalent of two weeks of a term-length course without an acceptable excuse may also be dropped by
the instructor. In these cases the student may be able to re-enter the class if the instructor agrees and signs a Schedule Request Form, reinstating the student. This decision is entirely up to the instructor.

**Note:** There is no automatic withdrawal process, and students may receive an “F” grade for the course if they do not officially drop the class prior to the deadline. An “F” grade may not be changed to a “W” grade except in the case of documented extenuating circumstances such as serious illness, or military deployment.

## Transcripts

### Release of student records

Students may have their DVC records released to them only if they have no outstanding debts and can show positive picture identification, in the form of a current student I.D. card, a California driver’s license, or a California I.D. card.

If a student wants his or her DVC records released to someone else, that person must show the Admissions Office an original permission note that has been signed by the student. Transcript requests require 10 working days to process. Additional time should be allowed for transcripts requested at the end of the term. For transcript fees, please refer to the “fees, costs and refunds” section. Rush service (one hour processing time) is available for in-person requests.

### Correcting academic transcripts

See “grade policy” in the “college policies and procedures” section.

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## Assessment Center

When new students submit their application for admission, they need to have their math and English skills evaluated at the assessment center. Students may take their assessments on a drop-in basis throughout the year. Students should undergo assessment if they would like help choosing an appropriate math, chemistry, English or ESL course. The assessment center is located in the Technical Education Building on the library side of the building in TE 107. Call first to check hours or visit [www.dvc.edu/admissions/assessment_center.htm](http://www.dvc.edu/admissions/assessment_center.htm).

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## Book Center

Students may purchase new and used textbooks, general books for recreational reading, backpacks, school supplies, computer software, and personal items at the Book Center. Visa, MasterCard, Discover and ATM cards are accepted. Sorry, no checks are accepted. Textbooks may be ordered through the DVC website at [www.bookcenter.dvc.edu](http://www.bookcenter.dvc.edu). With a student ID card, there is a five percent discount on most items.

The Book Center is located on the ground floor of the Business Education Building, near the Admissions Office. See the schedule of courses for hours of operation.
Career and Employment Services Center
The Career and Employment Services Center is located in the Technical Education Building, Room 101. This building houses the CalWORKs Program, Career Development, Cooperative Work Experience Education (Co-op Ed), Field Studies, Job Placement, and Volunteer Services. The Career and Employment Services Center offers students services to find immediate employment and resources to explore career options in a spacious environment with the latest materials and technology.

CalWORKs Program
The CalWORKs Program strives to empower each participant in attaining personal and academic growth, meaningful employment and long-term economic stability. The program is designed to help CalWORKs students complete the academic and career training they need to successfully move from welfare to work and to become economically self-sufficient. The program provides assistance with child care, work study, job development, job placement assistance, opportunities for personal growth and assistance in accessing resources necessary for college success. The CalWORKs office works with students to make sure they are meeting welfare-to-work requirements established by the county Department of Social Services and assure that they access all available resources. For more information call ext. 2722 or 2081.

Career Services
The following career resources are available to students, alumni, faculty and staff:

- a comprehensive career library of different occupational areas containing relevant books, periodicals, directories, and magazines;
- six computer workstations with Internet connections and Eureka software providing information on career fields, requirements, opportunities, and salaries;
- personal assistance with defining career objectives, goals, and/or planning;
- career-related workshops and classes offered on a variety of subjects;
- online career videos (closed-captioning available);
- a career website featuring links to job search sites, career information sheets, online career assessments, labor market trends, and a virtual career development services tour;
- information on earning credits for working through Cooperative Work Experience Education (Co-op Ed) or working with DVC faculty through field studies courses.

For more information, visit the DVC career website at www.dvc.edu/career or call ext. 2435.

Cooperative Work Experience Education—earn units for learning while working
This unique course allows working students to earn up to four units of credit for the learning that takes place while performing a paid or unpaid (volunteer or internship) job. To qualify, the student must be enrolled in a minimum of .5 units for summer and seven units for fall and spring, including the co-op units.

Co-op credits:
- transfer to many California State Universities;
- may be used as electives for the associate degrees;
- may be required or used as electives for certain certificate programs.

Co-op work experience:
- provides an opportunity for achieving new learning on the job by defining objectives/goals;
- enhances self-management skills through achieving established learning objectives/goals;
- improves communication skills with supervisor through increased dialogue and interaction;
- encourages new approaches to improving performance, expanding responsibilities, and achieving economic and professional recognition.

For enrollment information, contact Career Development Services, in TE-101, or call (925) 685-1230, ext. 2435 or visit the DVC career website at www.dvc.edu/career.

Contra Costa County Office of Education—Transition Program
This program offers support to disabled students that are enrolled in special education and are 18 to 22 years old. Support can include assistance in DVC classes, access to work and community resources and instruction in life skills. Services are delivered on an individual basis or group instruction. Referrals are handled through the special education I.E.P. process with the local school district. For more information, call ext. 1977.

Employment Services
This year-round employment service offers students, graduates, and non-students a variety of resources for their job search, including:

- MonsterTRAK—online system—to search for part-time and full-time permanent, short-term, seasonal and campus jobs, including career positions related to college majors;
- regularly scheduled on-campus recruiting events, including an annual on-campus job fair;
- Federal Work Study employment (FWS) for eligible financial aid recipients;
Child care

Daytime child care services make attending classes more convenient for many students. The Diablo Valley College Developmental Children’s Centers are located in the Family Life Building and Family Life Annex. For information about times, fees, and parent responsibilities, contact the Developmental Children’s Center office, ext. 2316.

Computer Center

The computer center has more than 100 computers available for use by currently enrolled DVC students doing schoolwork. The center is located on the ground floor of the Library Building. Student lab assistants are available to help.

Counseling Center

Counselors work with students to help them set goals and design plans for achieving those goals. The advisement/orientation course, Counseling 105, is an important element to begin this process. Counselors provide career, educational, and personal counseling. Students should come for counseling when they need help with any kind of problem that might affect their academic performance. Services and resources are located in the Counseling Center and include:

- information on transfer, associate degree, and certificate programs;
- the Transfer Center and its resource library;
- career planning, transfer and college success courses;
- personal counseling;
- individual and group counseling;
- counseling for international students, vocational rehabilitation, and students with disabilities.

Because course selection is so important and four-year college requirements change so frequently, students are advised to consult with a counselor each term before registering for classes. Students may schedule a half hour appointment or make a brief, five-minute drop-in visit.

Disability Support Services (DSS)

DSS provides instruction and services designed to increase access to college instructional programs for individuals with disabilities. Students with acquired brain injuries, delayed learning, learning disabilities, hearing impairments, visual impairments, psychological disabilities, mobility disabilities, and chronic health conditions may qualify for services. Services include specialized instruction, adaptive equipment, mobility assistance, sign language interpreting, note taking, textbooks and course materials in alternative formats, testing accommodations, educational counseling and planning and priority registration. For more information, please visit www.dvc.edu/dss or call the appropriate telephone/TDD number in the telephone directory of this catalog. To arrange an appointment with a DSS counselor, contact the Counseling Center.

DVC Connect Card

The DVC Connect Card is a convenient and technologically-sophisticated identification card that has a barcode and a magnetic strip, which is used to facilitate student interactions and enhance services such as library use, computer lab use, counseling and other campus services. All students receive a Connect Card. An optional ASDVC sticker, which is avail-
able for purchase, provides textbook and local merchant discounts and admission to DVC athletic events and other campus events. The card is issued through the Student Life Office, the library, and is also available at the San Ramon Valley Campus.

Emergency services
Contact the Police Services Office with any questions or problems regarding security, first aid, fire, lost and found items, thefts, or other crimes. For the police emergency number, check the telephone directory in the back of the catalog. The college has 14 code blue emergency telephones located on campus grounds and in the parking lots to directly contact police services.

English as a second language (ESL) assistance
If English is a student’s second language, the following information may be obtained at the Information Center: assessment testing for ESL and other classes, registration procedures, adding and dropping classes, credit/no credit option, financial aid, student organizations, area adult school programs, and public transportation. Students may also get information on English tutoring and computer-assisted instruction on pronunciation, reading and writing. Ask about our ESL Student Guide Book. The Information Center is located in the BE Building.

Evening escorts
Student staff members and/or police officers are available to escort students to and from their classrooms on the DVC campus after dark. Students should call police services to arrange for an escort to meet them on campus. See police services in the telephone directory in the back of the catalog for the number. This service is available on a first-call, first-served basis to all students and staff.

Extended Opportunity Programs and Services (EOPS)
This program is designed to help low-income and educationally disadvantaged students have a successful college experience and complete their career goals. EOPS provides comprehensive support services including EOPS orientation, academic counseling, one-on-one tutoring, priority registration, tutoring, peer advising, and transfer assistance. Additional services include book vouchers, work-study jobs on campus, four-year college admission application fee waivers, DVC Connect cards, membership fees for Alpha Gamma Sigma, materials fee for Counseling 110, and parent childcare grants for students who are not eligible for the CARE program. Special events and activities include field trips, cultural events, specialized workshops, and high school outreach and recruitment.

EOPS Summer Institute
The EOPS Summer Institute is a learning community that provides an intensive six-week college readiness program for 11th and 12th graders and high school graduates. The program strengthens college English and math skills. A course in Counseling also provides students with a plan for understanding and succeeding in college.

EOPS eligibility
Students must be enrolled full-time, be eligible for the California Board of Governors Enrollment Fee Waiver (BOGW), and meet the educationally-disadvantaged criteria.

Cooperative Agencies Resources for Education (CARE)
The CARE program provides child-care grants and support services to assist students who are single parents with children, thirteen years of age or younger and recipients of Temporary Assistance for Needy Families (TANF). The objective of the program is to help students complete college-level studies, vocational, and educational programs.

Food services
Cafeteria
Located in the College Center Building, adjacent to the Quad, the cafeteria is open for breakfast, lunch, and dinner, serving entrees weekdays, and providing hot and cold food and beverages on the go. Vending machines are also located in the cafeteria and are available during the hours the college is open.

Basement Cafe
Located in the basement of the Student Union Building, the cafe is open weekdays and offers Starbucks’ coffee, cold beverages, pastries, pizza, sandwiches, fresh soups, and salads at affordable prices.

Crow’s Nest
Located between the Physical and Life Science Buildings, the Crow’s Nest offers students quick and convenient food.

Norseman Restaurant
Located adjacent to the cafeteria and operated by HRM culinary art students, the restaurant treats students, faculty and the community to fine dining at affordable prices. Call for reservations. See the telephone directory at the back of the catalog.

DVC food service catering
Food service catering offers a wide variety of food and beverage choices for your campus event needs.
HRM Bakeshop
Located in the North West corner of the quad by the cafeteria, the bakeshop offers fresh baked breads, pastries, breakfast items, and desserts prepared from scratch by HRM culinary arts students daily. The bakeshop is open during fall and spring term. Special orders are available upon request.

HRM Catering
Catering for groups both on and off campus--custom banquets and buffets are offered on an ‘as available’ basis. For more information contact the HRM office.

Housing services
A bulletin board listing rooms for rent in nearby houses and apartments is located outside the Financial Aid Office. DVC does not investigate, approve or supervise these housing facilities. DVC does not have any student housing facilities of its own. Blank cards for students seeking roommates and landlords seeking tenants may be obtained in the Student Union Building.

Information Center/Outreach Office
The Information Center is a great starting point for new students to learn about all the student services available at Diablo Valley College. The friendly Information Center staff can provide students with information about admission procedures, registration steps, assessment testing, how to apply for financial aid, and the various other campus resources available to students to meet any specific need.

Students are encouraged to drop by or call. The Information Center is located in the Business Education Building, room 122, between the Book Center and the Admission Office. The hours of operation are Monday – Thursday, 8 a.m. – 7 p.m., Friday 8 a.m. – 4:30 p.m.

The Outreach Office coordinates outreach efforts with schools and community groups and provides linkages between Diablo Valley College and the K-12 system. The office offers prospective students, and their families, information about DVC degree and career opportunities, campus tours, and college-readiness workshops. Call to learn more about the services available through this office.

International Students Admissions and Services Office
International Students Admissions and Services (ISAS) is the office where international students must come to first apply for admission. The office offers information on admission and immigration requirements. ISAS offers enrolled international students advising in the following areas: I-20 issuance, immigration status, visa information, travel procedures, employment procedures, and mandatory health insurance. Other important student services offered at ISAS include medical referral information, the volunteer buddy system, banking information, and housing assistance. All international students are required by immigration law to report to the designated school official at ISAS upon arrival, when transferring, or when leaving the country. For more information, contact the International Students Admissions and Services Office in TE 109, or go to www.dvc.edu/isas.

Library services
The libraries, located at both the Pleasant Hill and San Ramon Valley Campuses, provide a student-centered learning environment with quality information resources, services and instruction. Librarians assist students with research and with using a wide range of DVC print and electronic resources. Hours are posted outside the library entrance.

Website: www.dvc.edu/library
Resources can include:
- print materials, including books, magazines and newspapers;
- electronic resources, including ALICE, the library’s online catalog, e-books, full-text magazines, newspapers and other databases accessible via the library website: www.dvc.edu/library;
- information commons with computers that provide access to electronic resources and the Internet;
- instruction: credit courses and drop-in workshops on library research skills;
- computer lab classroom;
- student group study rooms.

Media Center
The Media Center’s collection contains over 8,000 films, videotapes, DVD’s, audiotapes, foreign language cassettes, slide programs, and compact and video discs. All materials may be viewed by students in the Media Center/AV lab for use in their own research or to make up for a missed viewing in the classroom. Materials are listed on ALICE.

Equipment is available for general listening and viewing, film making, audio mixing and recording, videography, video editing, and other course projects. The Media Center is located on the ground floor of the library building.

Peer Support Center
(formerly the Re-Entry Center)
The Office of Student Life is committed to supporting reentry students and encouraging their success by providing a friendly place for the adult student to begin again.

The center is staffed by students enrolled in the CARDV 130 class, who are receiving information and training about careers in social services. The center is also staffed by students who have completed the CARDV course in previous semesters.
We offer an array of services to help students develop tools to ease their transition into college, and build a strong foundation for success. You can gather information on campus and community resources, meet friends, exchange information and experiences, as well as share concerns and interests. The center is located in the Student Union, room 202. For more information call ext. 2616 or 2086.

Student Leadership Series
Each of us is a leader in some aspect of our lives: at work, at home, in our community, church or in a student organization at DVC. The Office of Student Life is committed to ensuring that students have the opportunity to develop “values, ethical behavior…and a sense of civic responsibility” (DVC Philosophy statement) and the Student Leadership Series is one way we accomplish that goal.

The Student Leadership Series provides interested students with an opportunity to improve their leadership skills in an interactive, supportive environment. Workshops are open to all students, both new to leadership or with a great deal of experience. Students are encouraged to share their thoughts, ideas and experiences related to the leadership concepts and to apply these concepts to their current leadership experiences. No advance registration is required and students who complete six or more workshops will receive a certificate of recognition at the final meeting.

Student Life Office
Located in the Student Union, the Student Life Office trains future leaders in social responsibility and democratic leadership. Student organizations are open to all DVC students and serve as a laboratory of citizenship. Through involvement in student organizations such as the Associated Students (ASDVC), student clubs and leadership workshops, students develop valuable leadership and interpersonal skills that benefit them at DVC, in their community and their career.

The Student Life staff advises the student government and clubs and is a resource to current leaders, club advisors, and students who want to develop campus clubs and activities. Students are encouraged to be actively involved in college governance and campus activities to help ensure that their needs and interests are represented.

The Student Life Office is also the place to obtain bus passes, ID cards, and information about student discipline, academic standing, and campus crime statistics.

Student Services — San Ramon Valley Campus
SRVC students have access to many of the same student services available at the main campus including admissions, assessment, bookstore, computer labs, counseling, disabled student services, financial aid and scholarship information, job posting, math labs, library, orientation classes, transfer workshops, and other student service information and programs.

Student Union Building
The Margaret Lesher Student Union Building opened in January 1998. Funded primarily by student fees, the two-story building houses a computer lab, cafe, recreation room, quiet room for studying, services for clubs and student government, including meeting places and mail boxes and the Peer Support Center. The Dean of Student Life and the Student Life Office is also housed here. Students may also relax at the duck pond, located behind the building.

Students may pick up their free DVC Connect Cards in the Student Life Office with proof of current registration and a second form of identification. ASDVC stickers are available for purchase and provide a discount at the DVC Book Center and some local vendors. Other services available include County Connection bus pass sales, fax service, a coin-operated copier and a station for adding value to print cards.

Tutoring services
Students will benefit from the free tutoring services offered at DVC. Supervised tutoring, provided by trained student tutors, assists all students in becoming independent learners. Students improve critical thinking, computational, writing and study skills. They learn techniques for preparing for tests, learning a new subject, solving problems, and organizing ideas into essays. Working with a tutor can help students to keep up with the course workload and can strengthen their understanding of course material. The DVC Tutoring Center on the first floor of the library building coordinates tutoring services across DVC and SRVC campuses and will refer students to the appropriate tutoring lab or center for their needs. Please see the list of services below and check the schedule of courses for specific locations and times each term. Flyers with hours and locations are posted in the Quad, on major campus bulletin boards, in department/division offices and in most campus offices. More information is available through www.dvc.edu/tutoringservices. For further assistance, please call the Tutoring Center, ext. 2125.

Business Division/Accounting Labs offers tutoring on a drop-in basis or by arrangement for accounting and finance courses (location: BFL 106), and for business and computer courses (location: BFL 108-109). Workshops and courses in business computer applications are also available (location: BFL-107). Hours are posted outside each lab.

Chemistry and Physical Sciences Tutoring Lab offers tutoring on a drop-in basis in astronomy, chemistry, earth science (geology and geography), and physics. Location: PS-110. Hours are posted outside PS-110.

Computer Lab offers drop-in assistance with computer science courses. Ground floor of the library building. Monday - Sunday hours are posted in the lab.
**English Tutoring Lab** offers drop-in and regular ongoing tutoring to help students build the English skills needed for success. Regular tutoring is one-on-one peer tutoring for up to two hours a week throughout the semester. Other services include: computer-assisted instruction, a drop-in writing lab, and an online writing lab. Information on services are available on the first floor of the Learning Center Building in LC-105. See the schedule of courses for hours of operation.

**EOPS & DSS** offers tutoring in a variety of subject matters, namely subjects in basic skills areas. Please contact the office of EOPS and DSS directly to learn more.

**Foreign Language Lab** offers tutoring on a drop-in basis in Chinese, French, German, Italian, Japanese, and Spanish. Location: BFL-213. Hours are posted outside BFL-213.

**Life Sciences Lab** offers tutoring on a drop-in basis in biological science, nutrition, and oceanography. Location: LS-212. Hours posted throughout the LS building.

**Math Lab** offers tutoring on a drop-in basis for all DVC math courses. Students sign in at the front desk for assistance. Lab time is required for some math courses. A math instructor and student tutors are available. The math lab is located on the second floor of the Learning Center Building. See the schedule of courses for hours of operation.

**San Ramon Valley Campus** offers tutoring in a variety of subject matters. Please contact SRVC Office of Student Services, for further details.

**Tutoring Center** offers drop-in and by-appointment tutoring in the social sciences, humanities, computer science and math. Location: Ground floor of Library Building. Hours: Monday – Thursday, noon to 7 p.m.

**Transfer Center**

Diablo Valley College is a state leader in transferring students to four-year institutions, including UC, CSU, private in-state, and out of state institutions. As a result of our transfer record, many students choose to attend Diablo Valley College to complete their general education and pre-transfer preparation before moving on to a four-year school.

The Transfer Center is located in the Counseling Building at the Pleasant Hill campus. The Transfer Center staff, working closely with Counseling, seek to make all DVC students, and especially historically underrepresented students, more aware of their transfer opportunities and to assist them with the transfer process. The Transfer Center facilitates this process by offering the following resources and services:

- college catalogs from all University of California (UC), all California State University (CSU), and hundreds of other colleges within California and out of state;
- information about general education, pre-major preparation, transferable courses, articulation agreements, and guaranteed admission programs for UC, CSU and several private colleges;
- computers to access computer-based college information resources such as ASSIST, EUREKA, online admission applications, financial aid, and college and university websites;
- visits from UC, CSU, and private college representatives to provide individual transfer advising;
- workshops on application processes, writing an admission essay, UC guaranteed admission programs, concurrent enrollment with UC Berkeley and Cal State East Bay, and major selection;
- daily drop-in hours with DVC counselors;
- a friendly and helpful staff.

The Transfer Center also sponsors special events throughout the year such as campus tours, transfer days, and an annual transfer reception. All scheduled activities are posted outside the Counseling Building and on the DVC website at [www.dvc.edu/transfer](http://www.dvc.edu/transfer) and at [www.dvc.edu/calendar](http://www.dvc.edu/calendar).

**Women’s Resource Services**

**Women’s programs**

DVC has a rich heritage in offering women’s studies courses. Courses usually meet general education and transfer requirements. Courses are listed in the college catalog and schedule of courses under individual subject areas such as English, history, social science or health science. They are designed to expand the awareness of issues facing women of yesterday and today. See the schedule of courses for current class listings. See the catalog for the Women’s Services certificate requirements.

Students may find support through the Peer Support Center or the CalWORKs program.
Student activities

Associated Students of Diablo Valley College (ASDVC) - student government
The Associated Students of Diablo Valley College (ASDVC) is the government of the students! ASDVC represents student needs, interests and concerns and helps ensure a vibrant campus life through planning events and sponsoring activities to benefit students. Board meetings are every Tuesday at 2 p.m. and everyone is invited to attend!

The ASDVC represents and advocates for student concerns to campus faculty, staff and administrators by serving on College Committees including the Leadership Council, Planning Council, Budget Review Committee, Safety Committee, Faculty Senate Curriculum Committee, Transfer Effectiveness Task Force, Matriculation Committee, District Governing Council, and many others.

In addition to serving on College Committees, the ASDVC has its own committees to achieve their goals. These committees are open to all students. For meeting times, visit http://voyager2.dvc.edu/ASDVC/committees.htm.

The ASDVC is supported by funds from the Connect Card sticker sales. Funding provides scholarships for students, co-sponsorship of campus events, multicultural programs, leadership development opportunities for clubs, and support for student athletes. ASDVC is located in the Student Union Conference Room. For more information, visit http://voyager2.dvc.edu/ASDVC/ASDVCHome.htm or call ext. 2621.

Athletics
DVC’s men’s and women’s teams compete in 17 intercollegiate athletic sports. To compete in intercollegiate athletics, students need to maintain a 2.0 grade point average and be actively enrolled in at least 12 units throughout the season of competition. Short-term classes only count if they are at the beginning of the semester. Nine of the 12 units shall be in courses counting toward an associate degree, remediation, transfer, or certificate. A student athlete who has prior competition in a sport must have earned 24 units before competing in that sport for a second time. Eighteen of these units must be degree applicable Pre-participation physicals are required for all team members and may be obtained at DVC for a nominal fee or with an independent physician.

All athletes must complete a Student Education Plan (SEP) prior to competing in any intercollegiate sport. For more information on SEPs, contact sward@dvc.edu or www.dvc.edu/athletics.

Men’s teams
Men compete in baseball, basketball, cross-country, football, swimming & diving, tennis, track and field, and water polo.

Women’s teams
Women compete in basketball, cross-country, soccer, softball, swimming & diving, tennis, track and field, volleyball, and water polo.

The DVC newspaper
The Inquirer, an award-winning, student-run newspaper, highlights the rich diversity of the DVC community through its provocative and lively news coverage. Students enrolled in Journalism 126 work as a team to create eight to ten issues each semester. These Inquirer staff members hone their leadership and communications skills while learning the many jobs it takes to produce a media publication. Whether they work as reporters, editors, photographers, designers or advertising and business managers, Inquirer staff members gain valuable professional training. Many of them transfer to four-year schools and pursue careers in journalism. For more information, contact the Inquirer at inquirer@dvc.edu or visit the newsroom in Humanities 102. See telephone directory in back of catalog.

Student clubs
Most of the student activities at DVC are initiated by clubs or other student organizations. Over 40 student clubs help students make new friends, pursue special interests and gain experience organizing and working with others in social situations. A club handbook and other information about DVC student clubs (including how to start one) are available at www.dvc.edu/union/clubs.htm and in the Student Life Office.

Cultural activities

College art
DVC is continuing to develop an outstanding, permanent collection of student artwork. Each year art pieces are selected and purchased from DVC student art exhibitions. The art collection is displayed and rotated throughout the college to improve the college’s visual environment with quality art.
Art collections
The art department in conjunction with the campus administration has established three art collections: the permanent art collection featuring works by acclaimed artists, the faculty art collection, and the student art collection. Works from these art collections are installed throughout the campus.

Art Gallery
The Art Gallery presents several shows each year, featuring work by faculty members, students and regional artists. Artist's lectures, workshops, and visual presentations often accompany the exhibitions. Guest artists have included internationally known sculptors, painters, photographers, and printmakers.

Studios
DVC's art department offers a full range of working studios in painting, drawing, printmaking, digital imaging, photography, ceramics, sculpture and metal arts. The department presents art sales and exhibitions, workshops, and events throughout the year. For more information, contact the art department.

Campus performances

Dance performances
The dance department sponsors ballet, tap, modern dance, and jazz dance performances at the end of each term.

Film program
DVC's film program is one of the largest free community college film programs in the nation, screening old classics, silent films, foreign films and current popular releases. The film schedule comes out twice a year and is available from the Media Center/Forum located in the Library Building and at the Ticket Office.

Music performances
Each season our music department presents a series of evening concerts and free lunchtime concerts. DVC music groups include the Masterworks Chorale, Concert Choir, Chamber Singers, Orchestra, Wind Ensemble, Symphonic Band, Piano Ensemble, Jazz Ensemble, Jazz Workshop, Vocal Jazz Ensembles, and the Night Jazz Band. These groups perform on campus and throughout the state in festivals and concerts. For more information, contact the music department.

Speakers
DVC sponsors a variety of community-oriented arts events, lectures, and public forums throughout the year, often at no cost. Topics are usually related to politics, social issues, and the arts. For more information, call the Ticket Office. The number may be found in the telephone directory in the back of the catalog.

Theater productions
DVC drama produces a season of five plays each year, including at least one musical theater production, utilizing the Performing Arts Center and the intimate Arena Theater. The year-round Children's Theater Program produces a number of plays for youth and tours local K-12 schools. Each spring student directors produce a Brown Bag series of short plays and one-acts and each summer the drama department offers a six-week drama training program. For more information, go to the Performing Arts Department web page: http://voyager2.dvc.edu/drama/

Community Resources

Observatory
Opened in 1975, the observatory is equipped with telescopes for students studying astronomy. Located in the Science Center, the observatory facilities are open for night observation several times each semester.

Planetarium
Our planetarium presents astronomy programs for astronomy classes and for local school and community groups. These school programs are scheduled for Tuesday and Thursday mornings at 11:00 a.m. Reservations must be made ahead of time. There is an admission charge of $1 per person. The planetarium is located next to the Physical Science Building.

Ticket Office
Students can purchase tickets for most campus events at the Ticket Office, a small booth located adjacent to the Performing Arts Center. The Ticket Office also serves as a center for information about bus schedules and DVC events such as banquets, drama, dance and music. For the number, check the telephone directory in the back of the catalog.

Service activities

Dental Hygiene Clinic
DVC's dental hygiene clinic offers many services to the general public including dental hygiene examinations, radiographs (x-rays), oral prophylaxis (cleaning), initial periodontal therapy, scaling and root planning, sealants, fluoride application, and teeth whitening. These services are provided at a reduced standard fee. Contact the dental hygiene clinic located in the Life and Health Science Building for an examination appointment. See the telephone directory in the back of the catalog.
More educational programs

Apprenticeship
Our apprenticeship program offers related and supplementary instruction in plumbing and steamfitting. These courses meet the requirements established by the State of California for indentured apprentices. Selection procedures for acceptance into these programs are in compliance with federal and state laws and are on file with the Division of Apprenticeship Standards. Enrollment in class is limited to registered apprentices.

Apprentices may qualify for the associate degree when they have completed the graduation requirements and related training instruction.

Career pathways for high school students
DVC strongly supports outreach to and educational activities with students in local high schools who plan to continue their education in a career pathway. High school and college courses prepare students for their chosen career pathway using strategies that build real-world context for student learning. High school students may be concurrently enrolled in DVC classes (see the section of the catalog: Registering for courses). High school articulation agreements with DVC programs, permit high school students to earn college credit for work completed in high school through credit by examination (credit articulation), or high school coursework may be substituted for a certificate or degree requirement at DVC (non-credit articulation).

In order to qualify for non-credit articulation, within three years of graduation from high school, students must:

• Be registered at the college
• Complete six units of college credit

In order to qualify for credit articulation students must comply with the requirements for non-credit articulation and:
• Complete an examination approved by college faculty

High school students should verify requirements and procedures with their instructor and/or counselor to determine if their high school coursework qualifies for credit or non-credit articulation.

College for Kids
This program provides challenging activities for motivated young people in the fourth through the ninth grade. The activities take place on the DVC and SRVC campuses and are scheduled like college classes. Two three-week sessions are offered in June and July.

Educational Talent Search (ETS)
Educational Talent Search is a federally funded program designed to assist low-income and first generation college bound students between the ages of 11 and 27 with secondary school retention, graduation, re-entry and college placement. Students are provided with academic, college, financial aid, and career advising. The program offers test preparation strategies and assistance in preparing students for college entrance exams. Eligible students can receive assistance with study skills, time management, goal setting and self-esteem development. For more information, call the Educational Talent Search Office. See telephone directory in back of catalog.

Emeritus College: not-for-credit classes for adults
Adult learners enjoy classes with no homework, no tests, and no stress. This program is a non-profit, fee supported program that provides affordable, short-term (1-6 days) educational classes and activities designed especially for adults (50+).

The goal is learning for the fun of it. The curriculum covers a wide range of subjects including: art, computers, foreign language, health, history, law, literature, music, travel, and world events. Classes are currently held in 14 locations in Concord, Lafayette, Moraga, Pleasant Hill, San Ramon, Rossmoor and Walnut Creek.

In addition to classes and one-day workshops, Emeritus College offers monthly lectures, educational travel opportunities, concerts and other special events. Brochures are published four times each year. For information or to add your name to the mailing list, please call the office. See telephone directory in back of catalog for telephone number. Class schedule is also posted on the website: www.dvc.edu/emeritus.
Learning communities
A learning community is a group of specific course sections taken together, often linked by a common theme. This allows students to make new friends and easily form study groups. It also allows instructors to work together in a variety of ways. For example, they can stagger dates for tests and major assignments to even out the workload or have students work together on projects and presentations linking their subjects.

To enroll, see learning communities heading in course listing section of the schedule of courses.

Note: Concurrent enrollment is required in all course sections within a specific learning community, unless otherwise noted.

Linked classes
DVC offers linked classes in math and English, as well as other subjects. These classes are especially good for first time students because they help fulfill DVC’s core educational requirements. Linked classes offer the advantages of easy enrollment, convenient class times, more opportunities to get to know fellow students, a unique relationship with instructors, and different perspectives on the disciplines involved. When a student signs up for one of these classes, they must also enroll in the other.

Nationwide research has shown improved academic success for students who enroll in linked programs. Richer social connections between students lead to a stronger connect to the college and increased commitment to personal educational goals.

Look for linked classes under the heading Linked Classes in the printed Schedule of Courses, as well as under the respective discipline headings of the individual classes in the link.

Puente program
The Puente program is a one-year pre-transfer program open to all students who meet the eligibility criteria. The content of the course focuses on Mexican American/Latino authors and issues. All students will be required to participate in all courses and project activities, counseling and mentoring.

The program is based on three components that work together: English instruction, counseling and mentoring. English 118 and 122 help students with their writing skills, while counselors help with devising career options, an academic plan and identifying long-term goals. Mentors from the business or professional community share their personal, academic and career experiences with the students.

Since its founding in 1981, Puente has expanded to 50 plus community colleges throughout the state, including DVC. Studies indicate that community colleges with Puente programs transfer 44 percent more Latino students to the University of California than colleges without Puente.

Contact the Puente counselor, or the Puente English instructor.

ROTC
All DVC students interested in becoming commissioned officers in the United States Air Force, Army, or Navy may register for lower-division military science courses at UC Berkeley and have these credits applied toward a DVC’s associate degree. Credit is granted initially through UC Extension, but will be applied toward an associate degree at DVC when a transcript is received. Interested students should call UC Berkeley for more information.

Study abroad programs
Since the London program began in 1986, over 1000 DVC students have had an opportunity to study in London, England, in cooperation with the American Institute for Foreign Study. Courses are taught by DVC professors and may be UC and CSU transferable. Financial aid is available for selected programs.

Future offerings include:
- Summer term 2006 - Jinan, China
- Summer term 2006 - Spain
- Summer term 2007 - Mexico
- Summer study tour 2006 — Havana, Cuba (pending Federal Government approval)
- Fall term 2006 and 2007 - London, England
- Spring term 2007— Florence, Italy
- Spring term 2008— Paris, France

For more information, contact the Study Abroad Office located in FO-219, visit studyabroad@dvc.edu, or call ext. 2735.

Ujima program
Ujima offers opportunities for students to learn college success strategies and prepare for graduation and transfer. This innovative program focuses on the African American experience and supports students through counseling, African American history and math instruction. The Ujima Program is open to all students.
Academic policy
Students are expected to attend all class meetings, regardless of whether or not the instructor takes attendance. Students who miss more than two weeks of a term-length course may be dropped by the instructor. Students must contact the instructor directly to inform them of an absence. The college cannot relay such messages.

Field trips
If participating in a class field trip or other college sponsored activity causes a student to miss other classes, there will not be a penalty for the absence providing the work is made up and the student notifies the instructor in advance of the absence.

Leave of absence
Students who need to take a leave of absence during the term should ask a counselor for a petition and then receive written approval from their instructor and the vice president of student services. A leave of absence is limited to ten instructional days. Instructors may drop students who have been absent for the equivalent of two weeks of instruction without an approved leave of absence.

Academic dishonesty policy
Diablo valley College is committed to creating an environment where student achievement is championed and celebrated. Because the college values academic integrity as an essential component of academic excellence, students are expected to be truthful and ethical in their academic work. Commitment to academic integrity is the responsibility of every student and faculty member at Diablo Valley College.

Faculty and students come from a variety of backgrounds and cultures, giving rise to different understandings of moral and ethical behavior. Faculty should clearly state well-defined standards to reduce uncertainty and clarify expectations.

Academic dishonesty is defined as: an act of deception in which a student claims credit for the work or effort of another person or uses unauthorized materials or fabricated information in any academic work. Academic dishonesty is a violation of the DVC ‘Student Code of Conduct’ and will not be tolerated. Academic dishonesty diminishes the quality of scholarship at Diablo Valley College and hurts the majority of students who conduct themselves honestly.

Acts of academic dishonesty include, but are not limited to, the following:

Cheating
Unauthorized copying or collaboration on a test or assignment, or the use or attempted use of unauthorized materials;

Tampering
Alteration or interfering with evaluation instruments and documents;

Fabrication
Falsifying experimental data or results, inventing research or laboratory data or results for work not done, or falsely claiming sources not used;

Plagiarism
Representing someone else’s words, ideas, artistry, or data as one’s own, including copying another person’s work (including published and unpublished material, and material from the Internet) without appropriate referencing, presenting someone else’s opinions and theories as one’s own, or working jointly on a project, then submitting it as one’s own;

Assisting
Assisting another student in an act of academic dishonesty, such as taking a test or doing an assignment for someone else, changing someone’s grades or academic records, or inappropriately disturbing exams to other students.
Course work and units

Course work and study time per unit
Units of credit are a measure of the amount of study performed in a course; grades are a measure of the quality of that study. Generally speaking, for each three-unit lecture course, students spend three hours each week in class and six hours of study time out of class. A four-unit course that includes a lab would add another three hours each week in the laboratory.

Full-time status
A student must carry a minimum of 12 units in fall or spring term or four units in a summer session to be considered a full-time student. Fifteen units is the usual load for students who wish to complete the associate degree in two years.

Term unit limit
Students who wish to enroll in more than 18 units in the fall or spring term or nine units in the summer term must have permission from the dean of counseling and student support services prior to the start of the course.

Remedial unit limit
By state law, students are only allowed to enroll in a maximum of 30 units of remedial course work. Remedial courses are non-degree-applicable credit, basic skills courses and are numbered less than 100. The 30 unit limit includes all remedial courses taken at the three community colleges within our district.

Exemptions
Students enrolled in ESL courses or officially identified as having a learning disability are exempt from the 30 unit limit.

Variable-unit courses
Some courses give students varying amounts of credit; for example, from one to three units. The number of units varies, depending on the following factors: the contract between teacher and student; how many segments of the course the student completes (for example, the course may be divided into three four-week segments); the subject matter and/or number of meetings; and the number of classes the student attends.

Repeating courses
If students have received a satisfactory grade in a course, then:

• Students may repeat a course up to three times for additional credit and a grade only if it is labeled repeatable in the catalog. (See individual course listing for number of repeats.)
• In any other case, students must appeal to the dean of counseling and student support services to repeat a course in which they have already received a satisfactory grade. If permission is granted, the new grade will appear on their transcript but will not be calculated in their grade point average, and no additional credit will be given.

Exceptions
Courses that may not be repeated under any circumstances are dental courses and any course that is unusually dangerous to the student or others.

Repeating courses with substandard grade
If students have received a substandard grade in a course, then see the “Improving a grade point average” section.

Independent study courses
These courses are only available to students who have exhausted the learning opportunities of our regular course offerings. They require the student to undertake a significant project or research with clearly established, measurable learning objectives.

To apply for an independent study course, students should get tentative agreement on their research project from a supervising instructor. They must then complete an independent study form (available in the instruction office or division offices) and receive approval of the supervising instructor, division dean, and the vice president of academic affairs.

Deadlines
Independent study forms must be submitted for approval to the vice president of academic affairs before the sixth week of the term.

Adding and dropping courses
Courses may be added and dropped by online, telephone or in person at the Admissions Office. For information on adding and dropping courses, see the “registering for courses” section of this catalog.

Auditing of courses
Diablo Valley College does not permit auditing of courses. All students must submit an application for admission to the college and officially register.

Course prerequisites
Students wanting to enroll in a course with a prerequisite must satisfactorily complete that prerequisite before they are allowed to register. A course has a prerequisite to ensure that a student has the appropriate body of knowledge to successfully take the course. Courses with a co-requisite require that a student either has taken the co-requisite before or is taking it at the same time as the course.

Usually, a prerequisite is a course from a lower sequence of courses. For example: You may not enroll in Math 142 (Elementary Statistics with Probability) without first passing
Math 120 (Intermediate Algebra) with a “C” grade or better, or the equivalent. Usually, a co-requisite course is a lab or a course that provides supplemental instruction.

To see which courses have prerequisites and/or co-requisites you may look at the individual course offerings in the catalog or the DVC website at www.dvc.edu.

To register for a course with a prerequisite and/or co-requisite
If you have taken the prerequisite at DVC and completed it with a “C” or better, then you will be allowed to register online, by telephone or in person.

If you completed the prerequisite at another educational institution, request official transcripts to be sent to the Admissions Office before you register. English and Math courses will be automatically posted from your transcript. All prerequisites must be posted before you can register online or by telephone. Official transcripts usually take 2-6 weeks to arrive at DVC. You may submit your official or unofficial transcripts along with a Prerequisite Form at the time of your registration appointment and register in person.

Prerequisite challenge
Students who are denied enrollment in a course because they do not meet the prerequisite requirement may challenge the prerequisite. Challenge petitions are available in the Admissions Office.

How to file a prerequisite challenge
Students must file their challenge before the first meeting of the class at the Admissions Office. If space is available, the student will be enrolled in the course pending the outcome of the challenge:

- If the challenge is approved, the student will remain in the course.
- If the challenge is denied, then the student will be notified that he/she has been dropped from the course.
- If the challenge is not acted upon within five working days, then the student will be allowed to remain in the course.

Challenges claiming that the student has gained the knowledge and skills in another fashion, for example, through work or life experience, are reviewed by a faculty committee, whose decision is final.

Alternatives to course credit
We recognize that some students have already reached a portion of their educational objectives through prior schooling. Therefore, students can sometimes be exempted from a course requirement, or they can receive units of elective credit for their prior learning. We offer several alternatives to course credit.

Substitute courses
In some cases, students are allowed to use courses other than the ones listed in order to meet the general education requirement for the associate degree. For more information about course substitutions, contact a counselor.

Alternate course credit
DVC offers four options for students to receive alternate course credit: advanced placement, CLEP, DVC credit by exam, and military service credit.

Units awarded under any of these four categories may not be used to meet the residency requirement for the associate degrees.

1. Advanced placement (AP) - for the associate degree
Students who have earned a score of 3, 4, or 5 on certain college board advanced placement examinations, may receive credit towards an associate degree, and some examinations may be used in lieu of specific course requirements. An official copy of your test score(s) must be sent to the Admissions Office and a request made for this examination credit to be posted to student record. Associate degree requirements may be met through AP exams. The number of units awarded for each exam are as follows:

Area I-A. English composition
A score of 3 on either the English Language and Composition or English Literature and Composition examinations meet the requirement: “Prerequisite: Eligibility for English 122.”

With a score of 4 on either the English Language and Composition or the English Literature and Composition exam, the “course requirement” will be met.

Area I-B. Communication and analytical thinking
With a score of 3, 4, or 5 on either the Mathematics AB or BC exam, the “course requirement” will be met.

Area I-C. Mathematics proficiency
With a score of 3, 4, or 5 on either the Mathematics AB or BC exam, the proficiency requirement will be met.
Area II. Natural sciences
With a score of 3, 4, or 5 on the Biology or Physics B or Physics C exams, the “course requirement” will be met.

Units awarded toward a DVC associate degree:
- Biology: Score of 3, 4, or 5 (3 units)
- Chemistry: Score of 3, 4 or 5 (5 units)
- English Language and Composition: Score of 3 or 4; (3 units); score of 5 (6 units).
- English Literature and Composition: Score of 3 or 4; (3 units); score of 5 (6 units).
- Mathematics AB: Score of 3, 4, or 5 (4 units)
- Mathematics BC: Score of 3, 4, or 5 (8 units)
- Physics B: Score of 3, 4, or 5 (3 units)
- Physics C: Score of 3, 4, or 5 (3 units)
- Statistics: Score of 3, 4 or 5 (4 units)

Units awarded for AP exams may not be used to meet the residency requirement for the associate degrees.

Advanced placement - for transfer requirements
Each four-year college or university determines the amount of credit that will be given for AP examinations and how that credit may be used. Students planning to transfer should consult the catalog of the college to which they plan to transfer for information on how these examinations can be used to meet admission, general education, and major requirements.

For students planning to transfer to a University of California or California State University campus, refer to the “CSU G.E. - Breadth” and “IGETC” student handouts for use of AP exam credit towards meeting these general education requirements.

2. CLEP
Students may petition the Admissions Office for six units of ungraded elective credit for each general examination including: humanities, mathematics, natural science, and social science-history passed with a score of 500 or better in the college level examination program (CLEP), taken before 2001. The mathematics CLEP exam may also be used to satisfy the mathematics competency requirement of the associate degree. CLEP subject examinations in dental auxiliary education are available in selected areas. Students may also petition for a course substitute of appropriate associate degree general education requirements; these petitions must be approved by a faculty committee.

To take the CLEP, students must contact the Educational Testing Service in Princeton, N.J., and ask for a bulletin of test dates and locations. Since use of CLEP is limited, students should consult with a counselor before pursuing this option.

Note: credit is not granted in the same field for both the AP and CLEP exams.

3. Credit by Exam
Challenge examinations are available through DVC academic departments. The examinations DVC uses for challenging a course are usually more comprehensive than the typical final examination for a course, and they may be prepared by national organizations.

To take these examinations, students must file a petition with the department chair at least six weeks before the end of a fall or spring term. In addition:

- the student should not already have taken the course or attempted an examination in the course, whether at DVC or elsewhere;
- the student must have completed at least 12 units of credit at DVC;
- the course must not be a prerequisite for one the student has already taken or is now enrolled in;
- the student will be charged a fee for the challenge exam equivalent to the enrollment fee for the class.

If a student passes the examination, a grade is recorded on his or her permanent record with the notation “taken by examination.” If a student fails, that failure is not recorded.

The following courses have been approved by the departments for challenge by examination:

- Administration of Justice 120
  May be challenged by completing an approved Introduction to Administration of Justice high school course.
- Administration of Justice 121, 122, 140, 221, 222, 230, 260
4. Military service credit
Veterans may apply for evaluation of military service for credit through the Admissions Office. Credit may be granted toward an associate degree for the following training and examinations:

Six units of elective credit for the completion of basic training and one year or more of active duty in the military service upon submission of DD-214 (separation papers) to the Admissions Office.

Units for training taken in armed service schools. The guidance for evaluation of military service school training will be the publication, Armed Services Experiences, prepared by the American Council of Education.

Grade policy
The assignment of grades is the exclusive responsibility of the individual instructor. Our grading policies are based on our faculty’s philosophy, California Administration Code, Title V (Sec. 51300-51325), and the Contra Costa Community College District Board Policy 4001.

We use the following evaluative grades and non-evaluative symbols:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade points per unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A — Excellent</td>
<td>4</td>
</tr>
<tr>
<td>B — Good</td>
<td>3</td>
</tr>
<tr>
<td>C — Satisfactory</td>
<td>2</td>
</tr>
<tr>
<td>D — Passing, less than satisfactory</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(Not a recommending grade for continuation in sequential courses)</td>
</tr>
<tr>
<td>F — Failing</td>
<td>0</td>
</tr>
</tbody>
</table>

The following grade symbols are not considered in calculations of cumulative grade point averages, but the “W,” “I,” and “NC” grades are considered in determinations of progress probation and dismissal:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade points per unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>I — Incomplete</td>
<td>0</td>
</tr>
<tr>
<td>CR — Credit</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>(At least satisfactory or a C grade; units not counted in GPA)</td>
</tr>
<tr>
<td>NC — No Credit</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>(Less than satisfactory; units not counted in GPA)</td>
</tr>
</tbody>
</table>

The following are non-evaluative symbols:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>Withdrawal</td>
</tr>
<tr>
<td>IP</td>
<td>In Progress</td>
</tr>
<tr>
<td>RD</td>
<td>Report Delayed</td>
</tr>
</tbody>
</table>

Grades earned on non-degree applicable courses are not included in the degree applicable grade point average.

Academic honors
Students who have completed at least 12 letter-graded units during the term and earned a grade point average of at least 3.0 will receive honors recognition on their transcripts.

Graduation honors
Graduation honors will appear on a student’s transcript if a 3.5 grade point average in all college work (excluding non-degree applicable and upper division courses) is maintained at the end of the semester in which the student has applied to graduate. A student intending to graduate in the spring semester must have a 3.5 grade point average as of February 1 for honors to appear in the ceremony program, but the 3.5 grade point average must be maintained at the end of the semester to have honors appear on the student’s transcript.

Incomplete grades
An incomplete grade must be made up no later than one calendar year following the grade assignment or it will automatically revert to the alternate grade assigned by the instructor. Students who receive an “I” grade can not officially register for the same course in which they received the incomplete. Incompletes will be given only in cases of emergency such as accident, illness, or family emergency. Extensions to the one year deadline may be granted for good cause with instructor approval. The instructor must notify the Admissions Office.

Credit/no credit grades (CR/NC)
These grades are not figured into grade point averages, although the units are applied toward the 60 required for an associate degree. Four-year colleges often limit the number of CR units that they will accept from transfer students. You should check with the college you intend to transfer to, to determine if there are any negative implications to choosing CR/NC grading. CR/NC grades cannot be reversed after 25 percent of the course has passed.

Student choice (SC)
A course labeled “SC” means that before the deadline, students can decide to take the course for a letter grade or
for a CR/NC grade. Students must complete a form in the
Admissions Office to take the course for a CR/NC grade. If
students do not choose the CR/NC option before the dead-
line, they will be issued a letter grade for the course. It is
often best to discuss this choice with a counselor.

Students have until the fourth week of the course (or 25
percent of the term for shorter courses) to decide. After
the deadline has passed, the grading choice may not be
reversed.

Non-credit courses
Non-credit courses are open to all students for registration.
There are no enrollment fees for non-credit courses, but an
application for admission is necessary. Non-credit courses
are not graded and are not degree applicable.

Fairness in grading
During the first week of each course, instructors will give
their students a copy of their course syllabus, which will
include their grading policies. Students may expect instruc-
tors to:

- record the student’s grade for each oral and written
test or report that will affect the final grade, notify the
student of the grade, and, if necessary, review the
results with the student;
- evaluate the student within the first quarter of the
course and notify the student of the results of the
evaluation;
- count a final examination for no more than half the
course grade;
- base final grades on at least three of the student’s
tests and/or reports (exception in cases of violations of
DVC’s academic dishonesty procedure 400 1.04).

Note: Instructors are expected to retain any test or report
that is not returned to a student for a period of one school
year. Grade records should be available for a period of three
years after grades are awarded. Instructors who are not
scheduled to teach should leave their records with their divi-
sion dean.

Grade corrections
Students who believe that they have received an incorrect
grade must initiate a grade correction within one calendar
year after they received the grade. To have a grade correct-
ed, students must ask the instructor to correct the grade and
have them submit a grade correction form. The instructor
has final authority to determine if the student’s grade should
be changed.

Note: Except in extenuating circumstances such as serious
illness, grade corrections may not be made from “F” to “W.” It
is the student’s responsibility to withdraw from a course prior
to the drop deadline.

Student grade complaints and appeals
For full information on the grade appeal process, see
“student appeals for grade changes” under the “college and
student policies” section of this catalog.

Improving a grade point average
Course repetition
When students receive a substandard grade (“D,” “F,” or
“NC”) for a course, they may repeat it once in order to have
only the new grade used when their grade point average is
computed. However, the original grade will not be removed
from the transcript, and additional credit will not be granted.
Course repetition cannot be used to make up an incom-
plete (“I”) grade. A course with a substandard grade can be
repeated a second time without approval from the dean of
counseling and student support services. To attempt a class
a third time, students must petition the dean to request per-
mission. Students may come to the Counseling Center and
complete the petition to repeat form, or may go to
www.dvc.edu/counseling/forms/Petition1.htm to electroni-
cally submit the request.

Academic renewal without course repetition
Academic renewal allows students to have up to 15 units of
substandard grades (“D,” “F,” or “NC”) excluded (without the
student’s having to repeat the course) from their grade point
averages. To be eligible, students must have earned 20 con-
secutive units of “C” grade work or better since the substan-
dard grades were assigned. To be considered consecutive,
all units earned in a given semester must be “C” grade work
or better. Students interested in academic renewal should
request a petition from the Admissions Office.

Open course policy
It is the policy of the Contra Costa Community College Dis-
trict that unless specifically exempted by statute or regula-
tion, every course, course section, or class reported for state
funding, wherever offered and maintained by the District,
shall be fully open to enrollment and participation by any
person who has been admitted to the college and who meets
the prerequisites as may be established pursuant to regula-
tions contained in Title 5 Section 55200.

Probation and dismissal policy
Academic probation
We expect our students to make steady progress toward
their educational goals by maintaining a “C” average or bet-
ter in their courses. If a student’s cumulative record shows
that he or she has completed at least 12 letter-graded units,
that student must maintain a grade point average of at least
2.0, or be placed on academic probation. Students on stage
one probation will be mailed information encouraging them to attend a one-hour probation workshop. Students on stage two probation will be mailed information addressing additional requirements.

**Academic dismissal**

Students are subject to academic dismissal if, after they have been on academic probation for two consecutive terms, their grade point average in the most recent term is not 2.0 or better. When their overall grade point average rises to 2.0 or better, students are removed from academic probation. Students on dismissal status are prohibited from attending DVC.

**Progress probation**

We expect our students to complete courses once they register for them. If a student’s cumulative record shows that he or she has enrolled in at least 12 units, that student must successfully complete more than 50 percent of all those units, or else be placed on progress probation. We place students on progress probation if the number of units given a “W,” “I,” or “NC” on the student’s transcript amounts to at least 50 percent of the units attempted (this includes letter grades and units assigned the symbols “W,” “I,” “CR,” “NC,” “IP,” or “RD”). Students on stage one probation will be encouraged to attend a probation workshop. Students on stage two probation will be mailed information addressing additional requirements.

**Progress dismissal**

Students are subject to progress dismissal if, after they have been on progress probation for two consecutive terms, they do not complete more than half of the units attempted in the current term. When students complete more than half of their cumulative attempted units, they are removed from probation. Students on dismissal status are prohibited from attending DVC.

**Appeals and re-admission**

Students who are placed on probation or dismissal are notified in writing. The notification includes the deadline dates for appealing the dismissal to the dean of student life.

Dismissed students who wish to appeal their dismissal status must watch a brief video explaining the probation process (located in the Media Center) and file a “request for reinstatement” form with the dean of student life. Extenuating circumstances that would allow students to successfully appeal dismissal might include, but are not limited to, health problems, family emergency or extreme change in financial situation.

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**Course substitution policy for students with disabilities for DVC associate degrees or certificates**

Students with disabilities who wish to substitute a course for a course identified in DVC’s associate degree or certificate program requirements should review the college’s complete course substitution policy for students with disabilities. This policy is available in the Disability Support Services Office located in the Learning Center.

**DVC is “a drug-free” campus**

The DVC Student Code of Conduct prohibits the possession, consumption, sale, distribution or delivery of any alcoholic beverage in college buildings or on college grounds, or at college-sponsored or supervised activities, regardless of their location, unless authorized by college officials. The code also prohibits the use, sale, distribution, or possession on campus of, or presence on campus under the influence of, any controlled substances, as listed in Schedules I through IV of Section 202 of the Controlled Substances Act (21 U.S.C. Section 812) on district property or at any district-sponsored event. This includes student participation in field trips, athletic competition and/or any activity sponsored by the college. Any violations will be cause for disciplinary action up to and including expulsion. For additional information about the health risks associated with the use of illicit drugs and the abuse of alcohol, and the applicable legal sanctions under local, state or federal law, please visit: [www.dvc.edu/union/alcdrugs.htm](http://www.dvc.edu/union/alcdrugs.htm). Any student who needs information about substance abuse may consult a campus counselor or the Dean of Student Life who can provide the student with information about available treatment resources.
Equal opportunity policy and grievance procedures

DVC does not discriminate on the basis of race, color, national origin, sex, sexual orientation, disability, or age in any of its policies, procedures, or practices, in compliance with Title VI of the Civil Rights Act of 1964 (pertaining to race, color, and national origin), Title IX of the Educational Amendments of 1972 (pertaining to sex), Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975 (pertaining to age), and CCCCD Board Policy 2001. This nondiscrimination policy covers admission and access to, as well as treatment and employment in the college’s programs and activities, including vocational education. Inquiries regarding the equal opportunity policies, the filing of grievances, or requests for a copy of the college’s grievance procedures may be directed to the following: disability support services coordinator for disability related issues; Title IX, Sexual Harassment Title VI, discrimination based on race, color, or national origin, the vice president of student services, Administration Building, or the dean of student life in the Student Union Building.

This procedure affords students an opportunity to resolve a variety of complaints, including those alleging discrimination based upon race, sexual orientation, color, national origin, sex, handicap, and age. Students who require assistance in the use of this procedure or any of the above-mentioned policies should contact the vice president of student services or dean of student life.

Inquiries regarding federal laws and regulations concerning nondiscrimination in education or the district’s compliance with those provisions may also be directed to the chancellor, human resources and organizational development, Contra Costa Community College District, 500 Court Street, Martinez, CA 94553, or U.S. Department of Education, Office of Civil Rights, 221 Main Street, Suite 1020, San Francisco, CA, 94105.

Freedom of expression policy

It is the policy of the district and DVC to allow and protect reasonable and legal expressions, speeches and actions according to federal and state laws and Education Code #76120. Students have the right to exercise free expression, including the use of bulletin boards, the distribution of printed materials and the wearing of buttons, badges or other insignia. The policy excludes expression that is obscene, libelous or slanderous according to current legal standards or that incites students to create a clear and present danger or to commit unlawful acts on community college premises or damage to persons or property. Inciting students to riot, or the violation of lawful community college regulations or the substantial disruption of the orderly operation of the community college, is also prohibited. A copy of the policy is available at the Student Life Office.

Instructtional material policy

Students enrolled in credit/noncredit courses and programs may be required to provide certain instructional and other materials including but not limited to textbooks, tools, equipment and clothing if: The materials produce “an end product” with continuing value to the student outside the classroom or the materials required for the class have a continuing value to the student outside the classroom. Excerpted from Board policy 5027.

Instructors’ rights policy

If a student is disrupting class, the instructor may have him or her removed, and the instructor may also remove that student from the next class meeting. For more information about removal, see the “student code of conduct” section.

The instructor must give permission before a student can use a tape recorder in class.

Instructors have the exclusive responsibility for assigning grades. For more information, see the “grade policy” section of the catalog.

Matriculation rights and responsibilities

Student rights

The student has the right to the following matriculation services: admissions, assessment, orientation, advisement/counseling, and follow-up services (when needed).

Diablo Valley College students are guaranteed the following rights under the State of California Matriculation Regulations:

1. Assessment: Students are allowed to submit scores from assessment tests taken at another college within the last two years in lieu of taking the assessment at DVC, if the assessment instrument is state-approved and correlation with DVC courses can be established. Section 55530(c).

2. Prerequisites: A student may challenge a required course prerequisite. (Please refer to the “prerequisites” section.)

3. Complaints: A student may file a complaint if he or she believes DVC has failed to make a good faith effort to develop an educational plan or provide specified services once the student has declared a specific educational goal. Section 55525(d).

Student responsibilities

As part of the State of California Title 5 Matriculation Regulations, Section 55530 (d), all students are expected to participate in the matriculation process unless they are exempt (see “exemption” below) or waive the right to participate (see “waiver, appeal, and complaint procedures” below). Through the matriculation process at Diablo Valley College, students agree to the following responsibilities:

• to express at least a broad educational intent at the time of registration and state a specific educational goal upon completion of 12 units of course work;
College and student policies

• to complete a first-semester individual educational plan with the assistance of a counselor prior to registering for courses. This is usually done in the orientation and advising class (Counseling 105) for new students;

• to attend and complete courses: All students are expected to attend their classes regularly, complete assigned course work on time and complete their courses each semester. Students are expected to maintain regular progress towards their educational goal;

• to seek counseling at least once and as needed to review, update, and expand their educational plans and goals. It is particularly important for the following students to seek counseling:

  • those students on academic or progress probation (This is generally accomplished through participation in small group probation seminars);
  
  • those students enrolled in developmental courses. (This is generally achieved through counselor visits to such classes during the term or can be achieved in consultation with the instructor or instructor advisor in the department);
  
  • those students who have not declared an educational goal. Such students are sent a letter explaining options available in identifying and updating their educational goal.

Exemption

Some students may choose to be exempted from assessment, orientation or counseling. Typically students seeking an exemption from matriculation services meet one of the following criteria:

• the student has earned an associate degree or higher;

• the student is enrolled in a job-related course (see schedule of courses for list of specific courses that qualify);

• the student has one of the following educational goals: to learn or update job skills, to maintain certificate or license, or to pursue a special personal interest;

• the student is enrolled in six units or fewer.

Waiver, appeal, and complaint procedures

Students who wish to request waivers or file appeals or complaints on the basis of their Title 5 Matriculation Rights must follow the sequence of the steps outlined. (Students filing other types of complaints or alleging discriminatory practices should follow the procedures listed in the Student Code of Conduct and Student Disciplinary and Due Process Procedures.)

1. Initial review of waiver, appeal, or complaint

   a. The student should contact the office of the senior dean of outreach, enrollment management and matriculation and complete an “appeal or request for waiver” form or file a complaint regarding matriculation rights.

   b. The senior dean or designee may contact the student and schedule a meeting to discuss the problem and/or inform the student of the decision.

   c. In the event that the appeal or request for waiver is not granted, the student will be advised of his/her rights to further appeal and the correct procedures to follow.

2. Appeal to the vice president of student services or designee.

   a. If the initial appeal or request for waiver is not granted and the student does not accept this decision, the student may submit the initial form to the vice president of student services for further review.

   b. The vice president of student services or designee will review the appeal and may meet with the student if deemed necessary.

   c. The vice president of student services or designee will inform the student of the decision concerning the appeal or request for waiver.

Parking policy

All parking requires a parking decal or a daily permit, which must be displayed on the student’s vehicle. Students may park only in student parking lots. Parking is available on a first-come, first-serve basis, and having a permit does not guarantee that a student will find a parking space. Separate summer permits are also required. For more information, contact police services.

Sexual harassment policy

It is the policy of the college to provide a work and study environment free from sexual harassment. The campus community should be aware that the college will not tolerate any conduct that constitutes sexual harassment and will take measures to ensure compliance with all applicable federal and state regulations. Formal complaints may be filed with the district, using the district unlawful discrimination form.

Sexual harassment refers to sexually oriented verbal or nonverbal behavior that is not welcome, that is personally offensive, that depletes morale, and that therefore interferes with the behavioral effectiveness of members of the campus community. Sexual harassment is discriminatory and unlawful.

Unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature constitute sexual harassment when (1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual’s employment or education, (2) submission to or rejection of such conduct by an individual is used as the basis for academic or employment decisions affecting that individual, (3) such conduct has the purpose or effect of substantially interfering with an individual’s academic or
professional performance or creating an intimidating, hostile, or offensive employment, educational, or living environment.

Accountability for compliance with this policy rests with all members of the campus community. The president’s designee shall take appropriate steps to disseminate this policy, and the campus community shall be regularly informed of the policy.

Any member of the campus community who believes he or she has been sexually harassed should promptly report the facts of the incident or incidents and the name or names of the individual or individuals involved to the president’s designee. All such claims will be investigated and appropriate action will be taken. Please note that sexual harassment is a violation of the law; should an individual choose to proceed through the district, substantiated complaints may result in disciplinary action.

References/authority: Title VII, Section 703; Title IX of the Education Amendments of 1972. Procedures for complaints may be obtained from the vice president of student services’ office or from the Student Life Office.

Smoking policy

In recognizing the serious health risks associated with smoking, wishing to discourage both students and staff from becoming smokers, and recognizing the rights of non-smokers to a reasonably smoke-free environment, the following policy applies:

At the Pleasant Hill campus, smoking will be allowed only in the main campus quad area and the parking lots. At the San Ramon Valley Campus, smoking will be allowed only at the south (or rear) end of the building, past the “No Smoking” signs.

Adherence to this policy relies on the initiative of non-smokers to politely request that smokers follow the policy and on the courtesy of smokers to follow the policy.

Student appeals for grade changes

DVC is committed to the concept of academic freedom, which guarantees to individual instructors wide latitude in how they structure and conduct their courses. Such matters as the amount of homework, the kind and frequency of testing, the nature of the grading system, the degree of class participation expected, the choice of textbooks, the theoretical perspective, and the emphasized topics are all, within very wide boundaries, at the discretion of the instructor (described in the college catalog under “fairness of grading”).

Difficulties occasionally arise between students and faculty members about grades. Most misunderstandings are resolved amicably and the college urges students to discuss problems directly with faculty members. Because some disagreements cannot be resolved informally, however, DVC has a procedure for resolution of grade complaints that the student must initiate.

Grounds for grade changes

The most common problems are those concerning the grade assigned for course work. According to state law, a grade assigned by an instructor at the end of a term can be changed only by that instructor, except in cases of mistake, fraud, bad faith or incompetence. (A finding of bad faith should be supported by specific evidence that the instructor harbored ill-will or discriminatory intent, which motivated the instructor to assign to a student a grade lower than the grade the student should have earned based on objective criteria.) This policy does not apply to challenges of deadlines for credit (CR) or no-credit (NC). Credit/no-credit grades cannot be changed to letter grades once 30 percent of the class has passed.

The informal steps below—1, 2, 3 and 4—may be undertaken at any time; however, a formal complaint must be filed in writing with the vice president of academic affairs, or designee, no later than one year following the end of the term in which the grade was given. A formal complaint may be filed at any time with the chancellor who will refer the complainant to his designee, the DVC president. The president will designate the Complaint Review Committee to consider the complaint.

Process

If a clerical or tabulation error has been made, it can be handled through the grade correction process.

The “fairness in grading policy” section (under academic policy) clearly explains the grading guidelines a student can expect. At the beginning of each course, instructors must give students a copy of their grading policies.

If a student believes that a faculty member has deviated from these policies in the evaluation of his/her work, he/she may pursue a complaint under the description of mistake, fraud, bad faith, or incompetence. The student has the option of having a representative present at this and/or subsequent meetings.

1. In the event of a problem over a grade, the student should first meet with the instructor and request an explanation of the grade. If it is uncomfortable for the student to deal with an instructor alone, a person of the student’s choice may accompany him/her. If the instructor agrees to a grade change he/she fills out a grade change report in accordance with grade change correction policy.

2. If the student and the instructor cannot resolve the problem, the student next consults the division dean who will mediate the issue. The mediation effort shall include a conference with the department chairperson, the student and the faculty employee. The student may have a representative present. If the division dean is unsuccessful, he or she should prepare a written summary of the mediation efforts and forward it to the vice president of academic affairs.
3. If the student is not satisfied with these mediation efforts, he/she may request a formal hearing before a complaint review committee, which is the president's designee. The student must submit his/her complaint in writing and should include a precise statement of the nature of the complaint (mistake, fraud, bad faith or incompetence), any facts relevant to it, and the student's perception of a fair resolution. The complaint must be filed with the vice president of academic affairs, or designee, no later than one year following the end of the term when the grade was given.

The complaint review committee will be composed of three faculty members appointed by the Faculty Senate, one of whom must be from the same division as the faculty member involved in the complaint; two students appointed by the ASDVC; and the vice president of academic affairs, or designee, who will act as chairperson. (All six shall be voting members.) A tie vote means the complaint is not proven. The results will be referred to the president.

The student may be accompanied by a representative.

a. The committee shall meet within 30 instructional days of receipt of a complaint. If the complaint is filed within four weeks of the end of a term, the meeting may be delayed at the option of either the student, the faculty member involved or the vice president of academic affairs until the next term. In this event, the committee shall meet within the first four weeks of the new term. If time constraints prevent the meeting at the end of spring term, the meeting shall be held within the first 20 instructional days of the fall term. If this delay would result in hardship for the student or faculty member, they should advise the vice president of academic affairs and may request the meeting take place at the earliest time the other party(ies) and the vice president are available. In closed hearing, the committee will hear testimony by the student, the faculty member, the division dean who attempted mediation, and any supporting witnesses that either the student or faculty member care to introduce. The burden of proof shall rest with the complainant. Documentation may also be submitted. Summary minutes will be taken; the hearing may be tape recorded, but only with the permission of all participants.

b. Within ten instructional days, the committee, under the direction of the vice president of academic affairs, or designee, will meet and recommend a resolution based on a majority vote of all six members. A written recommendation will be submitted to the college president within 15 instructional days of such meeting; a minority report, if any, must be noted. Copies of the recommendations will be sent to the student, the faculty member, and all members of the committee.

4. If the complaint is denied, the student will be notified of his or her right to appeal the decision to the Contra Costa Community College District governing board within 30 calendar days of notification of the decision. If the complaint is upheld, the faculty member will be notified of his or her right to appeal the decision to the Contra Costa Community College District governing board, or designee, within 30 instructional days of notification of the decision. If an instructor fails to appeal a decision of the president sustaining the student’s complaint within 30 instructional days, the president shall order the grade in question to be expunged from the student’s records and enter in its place the grade deemed appropriate by the complaint review committee.

If the decision of the president is appealed and the governing board or designee sustains the student’s complaint, the president shall order the grade in question to be expunged from the student’s records and the grade deemed appropriate by the complaint review committee entered in its place.

5. The decision of the governing board or designee is final. All records of such hearings at any level shall be destroyed at the end of one year, unless the student initiates legal proceedings relative to the disputed grade within one year.

If the decision of the governing board or designee is unfavorable to the student, or if the student accepts an unfavorable decision of the complaint review committee, the student shall have the right to submit a written statement of objections to the grade, which shall become a part of the student’s records.

Steps for resolution of grade complaints:
1. Meet with instructor for an explanation. If unresolved, then,
2. Request division dean mediation. If unresolved, then,
3. Request formal hearing with complaint review committee by submitting a formal written complaint to the vice president of academic affairs office.
Student grievance policy (non-instructional)
The Diablo Valley College staff is dedicated to serving particular educational needs, which can be appropriately met by a college functioning in accordance with the broad purposes and regulations set forth in the education code of California. Accordingly, any student who believes there has been a violation of the regulations as stated in Title IX of the Education Act of 1972 may initiate a grievance (see “equal opportunity policy and grievance procedures”). For further information, contact the vice president of student services.

Student privacy rights
The Family Educational Rights and Privacy Act (FERPA) is designed to protect students from having their records released to persons or institutions without the student’s written consent. FERPA also provides students with the right to review their education records to insure that no inaccurate or otherwise inappropriate information has been included in their file. If the student discovers that there is inaccurate information in their record, they can challenge the content of such record.

Under the (FERPA), post-secondary educational institutions are not required to provide parents access to the educational records of their children regardless of the student’s age since all rights have been transferred to the student by statute.

FERPA rights extend to both current and former students and are implemented as follows:

Review of records: students may request to review their records by filing a written request with the Admissions Office. Within five working days, the education records will be made available for inspection.

Directory information: directory information, as defined by the college, may be released without prior notice to the student unless the student provides a written notice to the Admissions Office that they do not want such information to be released without their consent.

Student right-to-know and campus security act
It is the policy of the district to comply with the Student Right-to-Know and Campus Security Act (Public Law 101-542) signed into law November 8, 1990.

The district shall make available the completion or graduation rates of certificate or degree seeking, full-time students entering either of the colleges, to current students, and to each prospective student upon request prior to that student’s enrolling or entering into any financial obligation, beginning July 1, 1993, and annually thereafter.

Each college shall have a written set of procedures to implement the Crime Awareness and Campus Security Act, beginning September 1, 1992.

Students, faculty and staff may obtain a pamphlet containing information about campus crime and safety issues at the Student Life Office in the Student Union or at: www.4cd.net/police_services/CrimeReport.pdf and www.4cd.net/police_services/righttoknow.asp

Student Code of Conduct - Student Services Procedure 3027
I. Introduction
The Student Code of Conduct is a statement of the Contra Costa Community College District’s expectations regarding student standards of conduct, both academic and non-academic. Students are expected to obey all laws and district policies and regulations. Students shall be subject to discipline for violation of these laws, policies, and regulations. Student misconduct may also be subject to other regulations of the district, including but not limited to regulations regarding complaints of harassment and discrimination.

II. Definitions
For the purpose of these rules and regulations, the following words and terms are defined as follows:

A. “Governing board” shall mean the Governing Board of the Contra Costa Community College District.
B. “District” shall mean the Contra Costa Community College District, including but not limited to its administrative staff and each of its colleges.
C. “College” shall mean a college operated and maintained by the district.
D. “Member of the college community” shall mean the district trustees, the academic, support staff, and administrative personnel of the District, the students of the district and any other person while on district or college property or at a district or college function or activity.
E. “Day” shall refer to a college instructional day unless otherwise noted.
F. “Good cause” includes, but is not limited to the following offenses:
   1. Continued disruptive behavior, continued willful disobedience, habitual profanity or vulgarity, or the open and persistent defiance of the authority of, or persistent abuse of, college personnel.
   2. Assault, battery, or any threat of force or violence upon a student or college personnel.
   3. Willful misconduct, which results in injury or death of a student or college personnel or which results in cutting, defacing, or other injury to any real or personal property owned by the district.
III. Grounds for disciplinary action

A. Students shall conduct themselves consistent with the student code of conduct while on campus or participating off campus at a college sponsored event, including but not limited to international study programs. Students shall be suspended or expelled only for good cause.

B. The following constitute misconduct and grounds for disciplinary action:

1. dishonesty, such as cheating, fabrication, lying, plagiarism, knowingly furnishing false information, or reporting a false emergency to the district;
2. forgery, alteration, misappropriation or theft, misuse of any district or college document, record, key, electronic device, or identification;
3. misrepresentation of oneself or of an organization to be an agent of the district;
4. obstruction or disruption, on or off district property, of the district’s educational process, administrative process, disciplinary procedures, or other district functions and activities;
5. disruptive or abusive behavior, such as verbal harassment, habitual profanity or vulgarity, physical abuse, intimidation, hazing, or stalking of any member of the college community;
6. willful misconduct which results in an injury or death of a student or district personnel or results in cutting, defacing, or other damages to any real or personal property owned by the district or a member of the college community;
7. assault, battery, violent or threat of violence, or behavior that threatens the health and safety of any member of the college community;
8. theft of district property, or property in the possession of, or owned by, a member of the college community;
9. violation of district or college policies or regulations including but not limited to those concerning the formation and registration of student organizations, the use of college facilities or the time, place, and manner of public expression or the distribution of leaflets, pamphlets, or other materials;
10. failure to comply with the directions of the district or college officials acting in the performance of their duties;
11. the use, sale, distribution, or possession on campus of, or presence on campus under the influence of, any controlled substances, or any poison classified as such by Schedule D in section 4160 of the Business and Professions Code.
12. possession, consumption, sale, distribution or delivery of any alcoholic beverage in college buildings or on college grounds, or at college-sponsored or supervised activities, regardless of their location, unless authorized by college officials.
13. possession or use of explosives, dangerous chemicals, or deadly weapons on district property or at a campus function, without prior authorization of the college president;
14. engaging in lewd, indecent, or obscene behavior on district-owned or controlled property or at a district-sponsored or supervised function;
15. rape, date rape, sexual harassment, sexual assault, or threat of an assault upon a student or member of the college community on district property, or at a college or district-sponsored or supervised function;
16. unauthorized entry into, unauthorized use of, or misuse of district property;
17. Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the governing board or college;
18. knowingly assisting another person in the commission of a violation of the student code of conduct;
19. misuse of computers and networks which includes but is not limited to utilizing an unauthorized account, password, campus network, interfering with normal computer operations, circumventing data protection schemes or uncovering security loopholes, or violating terms of the software agreements;
20. willful disruption of the orderly operation of the campus;
21. any other cause identified as good cause by Education Code section 76033, not identified above; or any applicable penal code sections, or other applicable local, state, or federal laws.
22. any other ground constituting good cause.

C. Violation of parking laws, regulations, or rules shall not be cause for the removal, suspension, or expulsion of a student (Ed. Code § 76036).
IV. Types of disciplinary action

The following discipline may be imposed, individually or in various combinations, on any student found to have violated the Student Code of Conduct.

**Warning:**
A warning is a written or oral notice to the student that continuation or repetition of certain conduct may be result in further disciplinary action.

**Restitution:**
Restitution is reimbursement by the student for damage to, loss of or misappropriation of property. Reimbursement may take the form of appropriate service by the student to repair property or otherwise compensate for damage.

**Projects and assignments:**
Projects and assignments may include educational projects, service to the college, and other related discretionary assignments.

**Disciplinary probation:**
Probation is a status imposed for a specific period of time in which a student must demonstrate his or her conduct conforms to district standards of conduct as set forth in these regulations. Conditions may be imposed in at the discretion of the district or the president’s designee. Misconduct during the probationary period or violation of any conditions of the probation may result in more serious disciplinary action, such as loss of privileges, suspension, or expulsion.

**Loss of privileges:**
Loss of privileges is the denial of extra-curricular activities for a designated period of time. Violation of any conditions or campus regulations during the period of sanction may result in far more serious disciplinary action, such as suspension or expulsion.

**Removal:**
A student may be removed from class or office by an instructor or staff member with the assistance of police services, if necessary.

**Suspension:**
Suspension is a separation from the district for a designated period of time after which the student will be eligible to return. A suspension may consist of (a) a period of time from one or more classes for a period up to ten (10) days of instruction; (b) from one or more classes for the remainder of the school term; and e) from all classes or activities of the college for one or more terms.

**Expulsion:**
Expulsion is the permanent termination of student status by the governing board for good cause when other means of correction fail to bring about proper conduct or when the presence of the student causes a continuing danger to the physical safety of the student or others. [A student who is expelled is prohibited from participating in any college activities or programs and from entering district premises.]

V. Reciprocity of sanctions

During a period of suspension or expulsion, a student shall not be enrolled in any other college within the district. Disciplinary actions or sanctions shall apply to the student at all district colleges.

VI. Conduct related to college

After a hearing the president’s designee may impose an immediate suspension on a student when such action is required in order to protect property, safety, and to ensure the maintenance of order on the campus or at a campus function.

No student may be removed, suspended, or expelled unless the conduct for which the student is disciplined is related to college activity or college attendance.

VII. Record of disciplinary action

In accordance with Education Code section 76220, community college districts shall establish, maintain and destroy student records according to regulations adopted by the Board of Governors of the California Community Colleges. The president’s designee will create a record of disciplinary actions, along with relevant supporting documents and evidence. Consistent with the Family Educational Rights and Privacy Act and District Student Services Procedure 3009, this record shall be maintained as a confidential student education record and may not be released without the permission of the student, except as permitted by law and policy. The student shall have a right to inspect the record and to challenge the contents. Disciplinary records shall be retained in a manner consistent with state law, and will be destroyed following the third college year after the college year in which it originated.

In accordance with Education Code section 76234, whenever there is included in any student record information concerning any disciplinary action taken by the college or district in connection with any alleged sexual assault or physical abuse or any conduct that threatens the health and safety of the alleged victim, the alleged victim of the sexual assault or physical abuse shall be informed within three (3) days of the results of any disciplinary action by the college and the results of any appeal.

VIII. Removal by instructor

An instructor, for good cause, may remove a student from his or her class for the day of the removal and the next class meeting. (Ed. Code 76032 and 76033.)

A. Procedures before the removal

1. The instructor shall notify the student of the instructor’s consideration of the removal from class and the reasons for the proposed removal.

2. The instructor may remove the student from the classroom immediately. Under normal conditions,
the instructor should permit the student an opportunity to present a rebuttal to the accusation or otherwise offer relevant comment on the proposed removal. There need be no delay between the time notice is given to the student and the time of such a review.

3. The instructor shall decide whether or not to proceed with the proposed removal after hearing the student's explanation and considering all of the information relative to the issue. There need be no delay between the time notice is given to the student and the removal.

4. The decision may be given to the student either orally or in writing.

5. The instructor's decision is final and may not be appealed.

B. Procedures after the removal

1. Immediately following the removal, the instructor must notify the college president or president's designee of the removal.

2. If the student removed is a minor, the college president or president's designee shall ask the parent or guardian of the student to attend a parent conference regarding the removal as soon as possible. If the instructor or the parent or guardian so requests, a college administrator shall attend the conference.

3. The instructor may request that the student meet with the college president or president's designee, within three (3) days of removal, prior to returning to class.

4. During the period of removal, the student shall not be returned to the class without the concurrence of the instructor.

IX. Preliminary procedures for suspension by president's designee

The following procedures shall be taken before suspension except in the event that an emergency/interim suspension is made as set forth in Section XIV.

A. Administration. The president's designee shall administer these procedures and take appropriate action, subject to the approval of the college president and the governing board if required herein or otherwise by law.

B. Disciplinary action that may be imposed. The president's designee may suspend or impose a lesser sanction on a student. A suspension may consist of a period of time as follows:

1. from one or more classes for a period up to ten (10) days of instruction;
2. from one or more classes for the remainder of the school term;
3. from all classes and activities of the college for one or more terms. A suspension shall not exceed two (2) years.

C. Reporting of conduct. Alleged student misconduct shall be reported to the president's designee. The president's designee shall be the vice president of academic and student affairs or the senior dean of student services at Contra Costa College, the dean of student life at Diablo Valley College, and the senior dean of student services at Los Medanos College. Other officials may be designated as the president's designee, whenever necessary for the efficient operation of the district.

D. Investigation. Upon receiving a report of alleged student misconduct, the president's designee shall initiate an investigation.

E. Notice. Before imposing discipline, the president's designee shall give or make reasonable efforts to give the student oral or written notice of the reason for the proposed disciplinary action. If the student is a minor, the president's designee shall also notify the parent or guardian of the investigation and charges.

F. Preliminary hearing. Within a reasonable period of time (normally with five (5) days following the delivery to the student of the notice referred to above), the president's designee shall offer the student an opportunity to attend a meeting ("preliminary hearing") at which time the student may present a rebuttal to the accusation or otherwise offer relevant comment on the proposed suspension. There need be no delay between the time of the notice given to the student and the time of the meeting.

G. Determination after preliminary hearing. The president's designee shall decide whether or not to proceed with the proposed suspension and/or to recommend expulsion after hearing the student's explanation and considering all of the information. If the decision is to suspend for up to five (5) days, the president's designee may inform the student of the decision and send a written confirmation to the student's last known address within five (5) working days. The confirmation shall include a statement that the decision to impose a suspension for five (5) days or less, or a lesser sanction, is not appealable. If the decision is to suspend for more than five (5) school days or to recommend expulsion, the president's designee shall send the student a written notice via personal delivery or certified mail to the student's last known address as set forth below.

H. Notice to the college president. The president's designee shall report any disciplinary action imposed to the college president.
I. Notification after a suspension of more than five (5) days. If the president’s designee imposes a suspension of more than five (5) days, the president’s designee shall promptly send the student a letter of notification that is hand delivered or sent via certified mail to the student’s last known address. The notification shall include:

1. a statement of the charges, the reason for the suspension or recommended expulsion offer, and a description of facts related to the misconduct, including the evidence against the student, the date of the incident(s), time of the incident(s), and location of the offense(s);
2. a copy of the student code of conduct and board policy;
3. an explanation that a student who has been suspended for more than five (5) days is entitled to appeal the decision and has a right to a further hearing (“appeal hearing”). The notification shall also state that a request for an appeal hearing shall be filed within five (5) days of the service or mailing of the notification, whichever is earlier;
4. a statement that the student has the right to be accompanied at an “appeal hearing” by an on-campus advisor of his or her choice. If the student decides to be accompanied by an advisor, the name and address of that advisor must be submitted to the president’s designee at the time the appeal is filed;
5. the president’s designee may note that he or she will also recommend expulsion;
6. the notification shall include the date, time, and location of an appeal hearing if requested by the student.

J. Student right to appeal a suspension of more than five (5) days. The student may accept a suspension in excess of five (5) days without admitting the conduct charged. In such a case, the decision of the president’s designee will be final and not subject to a further appeal hearing. Should the student not accept a suspension in excess of five (5) days, the student has a right to appeal. A suspension appeal must be filed by the student no later than five (5) days from the date the notification letter is personally served or mailed.

K. Schedule of hearing. The president’s designee shall schedule an appeal hearing no later than ten (10) working days from the date of the suspension.

X. Hearing authority for appeal hearing

A. The college president will assign either an administrative hearing officer or may utilize a student discipline committee (“committee”) to conduct appeal hearings at the college (“hearing authority”).

B. An administrative hearing officer shall be a college official.

C. A committee shall include: one faculty member, one administrator or manager, and one student. The selection process for the committee, if any, will normally occur at the beginning of each academic school year.

1. The academic senate will select a faculty representative and alternate(s). Vacancies will be filled by an action of the academic senate.
2. The associated student body will select a student representative and alternate(s). Vacancies of student members shall be filled by an action of the associated student body.
3. The college president will select the administrative or management representative and alternate(s). The administrative or management representative will serve as the committee chair.

The student or the college staff member shall notify the committee if he or she has a conflict of interest because he or she is involved in the discipline matter and, therefore, is unable to service as a neutral party.

4. Alternate faculty, administrative, and student members shall be appointed to ensure that a standing committee can always be convened promptly.

XI. Appeal hearing procedures

A. The president’s designee shall submit to the hearing authority: a description of the charges, notices, evidence, and a copy of the proposed decision. The president’s designee shall present relevant evidence regarding the alleged misconduct. The accused student may then present any relevant evidence. Each party may call, examine, and cross-examine witnesses. Written statements, if any, shall be submitted under penalty of perjury. The hearing authority may also question witnesses. Opening and closing statements shall be limited to five (5) minutes. The president’s designee shall speak first, followed by the student.

B. The hearing authority shall rule on all questions of procedure and admission of evidence.

C. Hearings need not be conducted in accordance with strict rules of evidence or formality of a court hearing.

D. The hearing authority shall consider no evidence other than that evidence received at the hearing. Hearsay evidence may be used for the purpose of supplementing or explaining other evidence, but shall not be sufficient in itself, to support a finding.

E. A student may be accompanied by an advisor of his or her choosing, at the student’s request. The role of the advisor is passive in this procedure. The advisor may be present at the hearing and may counsel the
The advisor may not address the hearing authority and shall not be permitted to participate in any way during the hearing except to offer counsel to the student. If the student decides to be accompanied by an attorney, the name and address of that attorney must be submitted to the president’s designee at the time the request for hearing is filed.

F. The appeal hearing shall be closed to protect the privacy and confidentiality of everyone involved unless the student and district agree in writing to have a public hearing at least five (5) days in advance of the hearing. A closed hearing will be closed to everyone except the following:

1. the student charged;
2. the hearing authority;
3. an advisor for the student charged, if so desired;
4. the president’s designee;
5. a witness, while presenting evidence;
6. an on-campus advisor for a witness while presenting evidence.

G. An official audiotape recording of the hearing shall be kept. The record shall be the property of the district. The student charged may listen to the tape at a mutually agreeable location at the college. An accused student may, upon request, be provided a copy at his or her own expense.

XII. Hearing authority’s consideration and recommendation

Following presentation of the evidence, the hearing authority shall privately consider the evidence with all persons excluded. The hearing authority shall send a written report to the college president within five (5) working days of the termination of the hearing. The report shall contain the following information:

A. a summary of factual findings and a determination that the accused student did or did not commit the act(s) charged;
B. a finding that the student’s act(s) did or did not constitute a violation of the Student Code of Conduct;
C. a recommendation for upholding or modifying the proposed discipline. The hearing authority may also recommend further investigation.

XIII. College president’s decision

A. The college president shall reach a decision after reviewing the report submitted by the hearing authority. The college president may refer the matter back to the committee or hearing officer for further clarification on details of the case, such as evidence and findings of fact. The college president may uphold the suspension, uphold the recommendation by the hearing authority, or adopt a lesser sanction, if appropriate. A written statement of the decision shall be sent via certified or registered mail to the student’s last known address within three (3) working days of the college president’s receiving the hearing authority’s recommendation.

B. The decision of the college president to suspend or impose a lesser sanction shall be final and not subject to further appeal.

C. The college president shall report a disciplinary suspension of any student to the governing board at its next regular meeting after the suspension has been imposed. A copy of the suspension determination, including the reasons for the suspension, shall be placed in the student’s permanent disciplinary record (not the transcript).

D. If the college president determines that a student should be expelled, he or she will forward that recommendation through the chancellor, to the board of trustees for determination.

E. In the event that a college president is or will be unavailable for the making of a prompt decision, the college president may appoint an unbiased designee to act on the appeal.

XIV. Emergency interim suspension

A. An emergency/summary suspension is an immediate suspension imposed upon a student for good cause. (Ed. Code § 66017.)

B. Notwithstanding the foregoing, the college president or the president’s designee may impose an emergency/summary suspension. It is an extraordinary measure and shall be utilized when necessary to protect lives or property and to ensure the maintenance of order pending a hearing.

C. A preliminary hearing shall be provided within ten (10) calendar days of an emergency/summary suspension. (Ed. Code 66017.) The procedures set forth in Sections IX and X shall apply to the preliminary hearing and any appeal hearing.

D. An emergency/summary suspension shall be reported to the governing board at its next regular meeting after such suspension has been imposed. A copy of the suspension may be placed in the student’s permanent record at the discretion of the college president.
XV. Notification

The college president or president’s designee shall, upon suspension or expulsion of any student, notify the appropriate law enforcement authorities of the county or city in which the school is situated of any acts of the student that may be in violation of section 245 of the Penal Code. (Ed. Code 76035.)

XVI. Extensions of time

Calendar restraints may be extended with the agreement of both parties.

XVII. Expulsion

The governing board has the sole authority to expel a student. If the college president determines that a student should be expelled, he or she shall send the recommendation through the chancellor to the board of trustees. Education Code, Sections 66300, 76030-76037

Historical annotation: adopted 03/02/04
Related board policy: board policy 3012
"I didn’t have the money for college and I didn’t think I’d qualify for financial aid…I also didn’t want to deal with filling out any complicated forms. But it really wasn’t that bad, and the financial aid office was a huge help. Now I’m transferring to Berkeley in the fall!"

Moises Yi
Transfer

Transfer information .............................................................. 51
CSU general education requirements ..................................... 54
Intersegmental general education transfer curriculum ............. 57
California articulation number ............................................. 60
Transfer information

Students should take advantage of the publications and services in our Counseling Center, Transfer Center, Library, Career Center, and EOPS Office.

Transfer to the California State University (CSU)

Applying for transfer
To be eligible to apply for transfer as a junior, students must complete at least 60* transferable units with a “C” (2.0) grade point average or better (non-resident students must have a 2.4 or better) and meet admission requirements.

*number of units subject to change

Students who qualified for CSU when they graduated from high school may apply for transfer if they have maintained acceptable grades at DVC. See “CSU transfer admission requirements” section.

General education certification
Students who have completed 39 units of general education course work required by CSU can request DVC to certify this completion. Students then need only fulfill nine more units of upper-division, general education requirements at CSU. Students must also complete any additional units specifically required by a CSU campus.

Partial general education certification
If a student has met specified subject area minimums, the student can request that DVC certify partial completion. However, students would have to complete the remaining general education requirements at the transfer campus according to its own procedures and rules.

Obtaining a general education certificate
To obtain the certification, students must file a GE/IGETC request form at the DVC Admissions Office.

Meet with a counselor
Because the requirements for a particular major may differ from one CSU campus to the next and because requirements may change yearly, students must consult regularly with a counselor when selecting their courses.

Acceptance of CR units
Each CSU campus sets its own limits as to the number of CR (credit) units it will accept.

Courses that transfer to CSU
All DVC courses, except those listed below, will transfer to CSU. Courses that transfer will receive at least elective credit; check with your counselor for full information on the possible use of these courses toward general education breadth and major requirements.

Courses that will NOT transfer to CSU
- All courses numbered less than 100
- Counseling 100, 105
- Dental Hygiene 122, 130, 230, 231
- Electricity 266, 267
- English 105, 110, 116 (transferable if taken prior to F ’05), 118 (transferable if taken prior to F ’05)
- Library Studies 100
- Mathematics 110, 110SP, 114, 120, 120SP
- Plumbing (all courses)
- Real Estate 150
- Steamfitting (all courses)

Impacted programs
The term impacted, when applied to a program or major, means that the program usually attracts many more applicants than it can accept. Consequently, there are special requirements and selection procedures for admission. Students intending to transfer and pursue these majors should consult with a counselor and write to the transfer institution to request its most recent admissions information.

Impacted programs at a CSU campus can vary from year to year. In the past, the following majors have been impacted at some California State University campuses:

- architecture
- business administration
- communication
- criminal justice/administration
- graphic design
- health science
- international business
- journalism
- kinesiology/physical education
- medical technology
- nursing
- occupational therapy
- physical therapy
- psychology
- radio/television and film
- social work

CSU transfer admission requirements

Lower division transfer requirements
Students will qualify for admission if they:

- have completed fewer than 60* transferable semester units and have a grade point average of 2.0 (“C”) or better in all transferable units attempted;
- are in good standing at the last college or university attended;
- meet the admission requirements for first-time freshman (ie., have completed with a grade of “C” or better each of the courses in the comprehensive pattern of college preparatory subject requirements and have an eligibility index).

If all subject requirements were not completed in high school, appropriate college courses may be used to make up the missing subjects. Non-residents must meet the eligibility index for non-residents.

Some impacted campuses do not accept lower division transfers (students with less than 60 transferable units.) Contact a counselor for more information.
Upper division transfer requirements
Transfer eligibility is based on the number of transferable units attempted, and not on all college units attempted. Consult with a counselor for details.

Students who have completed at least 60 transferable semester units, have a grade point average of 2.0** “(C)” or better in all transferable units attempted, and are in good standing at the last college or university attended, may become eligible if they have completed at least 30 semester units of college courses with a grade of “C” or better in each course to be selected from courses in English, arts and humanities, social science, science, and mathematics at a level at least equivalent to courses that meet general education requirements.

The 30 semester units must include the following:

General education requirements:

- English communication -- at least nine semester units to include written communication, oral communication, and critical thinking
- Mathematics -- at least three semester units
  or
- Intersegmental General Education Transfer Curriculum (IGETC):
  - English communication -- at least nine semester units in English composition, oral communication, and critical thinking
  - Mathematics -- at least three semester units

Admission requirements for a major
Many majors have specific course requirements that must be met to be eligible for admission. A higher grade point average than the minimum may also be required. Consult with a counselor for more information.

* This number of units is subject to change.
** Non-residents must have a grade point average of 2.4.

Transfer to the University of California (UC)
Course requirements vary from one UC campus to the next. Therefore, students should work with a counselor to first select a particular UC campus and then formulate a strategy for completing that campus admissions requirements, major requirements, and general education requirements.

Students should consult the catalog of the UC campus they have chosen to find out specific details regarding transfer, major, and breadth requirements.

Applying for transfer
To be eligible to apply for transfer as a junior, students must have completed at least 60 units of UC transferable credit and meet specific admission requirements. In most cases, students may transfer up to 70 semester units of credit from a community college.

Lower-division transfer
Many UC campuses do not accept lower-division transfers (students with less than 60 UC transferable units.)

Letter graded and CR units
No more than 14 of the UC transferable units may be graded CR. All courses required in a major must be taken for a letter grade.

Transferable courses
A listing of information on transferable DVC courses and UC credit limitations is available from a DVC counselor.

Selection for admission to UC
Many campuses of the University of California receive many more applicants to a particular major or program than it can accept. Consequently, there may be certain course requirements, special selection procedures and a higher grade point average requirement than the minimum admission requirement for UC transfers (2.4**). Students interested in transferring to UC are urged to consult with a counselor as soon as possible in order to determine the requirements for the major to which they plan to apply. Knowledge of these requirements will maximize a student’s chances of being selected by the UC campus of their choice.

Selective majors at the UC campuses vary from year to year. In previous years, admission to the following majors in the UC system has been selective:

- Berkeley - admission to most majors at UC Berkeley is selective
- Davis - biological sciences, engineering, computer science, and psychology
- Irvine - biological sciences, engineering, computer science, and psychology
- Los Angeles - communications, economics, engineering, film and television, and life sciences
- Riverside - business administration, majors in the College of Natural and Agricultural Sciences, and engineering
- San Diego - biological sciences and engineering
- San Francisco - dentistry, dental hygiene, and pharmacy
- Santa Barbara - biological sciences, computer science, and engineering
- Santa Cruz - art, engineering, environmental studies, and psychology

**Non-residents must have a grade point average of 2.8.

Minimum admission requirements for UC transfer
To qualify for admission to the university as a transfer student, applicants must meet one of the three sets of requirements described below. The terms subject, scholarship, and examination refer to the freshman admission requirements of the university. Confer with a counselor for details.

1. If a student was eligible for admission to the university when they graduated from high school (meaning they satisfied all subject, scholarship, and examination requirements), they are eligible to apply to transfer if they have maintained a grade point average of at least 2.0 (“C”) in the UC transferable courses.*
   *subject to change

2. If, when a student graduated from high school, they met the scholarship requirement but did not satisfy the subject requirement, they must take transferable college courses in those missing subjects in order to be eligible to transfer. Students must earn a “C” grade or better in each of these
required courses and maintain a grade point average of at least 2.0 in all UC transferable college course work.*
*subject to change

3. If a student was not eligible for admission to the university when they graduated from high school because they did not meet the scholarship requirement, they must:
   a. Complete 60 semester units of UC transferable college credit with a grade point average of at least 2.4** and;
   b. Complete the following course pattern, earning a “C” grade or better in each course:
      - two UC transferable college courses (three semester units each) in English composition; and
      - one UC transferable college course (three semester units) in mathematical concepts and quantitative reasoning; and
      - four UC transferable college courses (three semester units each) chosen from at least two of the following subject areas: the arts and humanities, the social and behavioral sciences, and the physical and biological sciences.

**Non-residents must have a grade point average of 2.8.

UC special admissions programs
The following UC campuses offer agreements that guarantee DVC students admission as transfer students provided they complete certain courses with a designated grade point average:
UC Davis, UC Irvine, UC Merced, UC Riverside, UC San Diego, UC Santa Barbara and UC Santa Cruz. The admissions agreements offered by these campuses vary according to their requirements. Please contact a counselor for more information.

Transfer to UC Berkeley
UCB has been limiting its acceptance of transfer applicants to those who have completed at least 60 UC transferable semester units. Students should consult with a counselor to select a major early in their academic career and complete the lower-division course work for that major and meet admissions requirements to transfer as juniors.
Transfer students applying for fall term at UCB in most cases must have completed all course and unit requirements by the end of the previous spring term. Recently, applications to UCB are accepted for fall terms only.

UCB College of Letters and Science
The college accepts transfer students with at least 60, UC transferable semester units who have completed the reading and composition, foreign language and quantitative reasoning requirements of the IGETC. Transfer students should have also completed the lower division requirements for their major. Consult with a counselor for more information.

UCB Walter A. Haas School of Business
The school accepts students who have completed at least 60 UC transferable semester units. This is a highly impacted program and transfer students must have satisfied the following requirements:
- Students must complete all approved, letter graded prerequisite courses in accounting/business, computer science, economics, English, foreign language, mathematics and statistics.

- Students must complete seven or more of nine required breadth courses* with a unit value of at least three semester units each, in subjects related to behavioral sciences, international studies, natural sciences, and social sciences. Consult a counselor for specifics of the articulation agreement.
  *subject to change
- Students must participate in extracurricular activities or work experience and demonstrate good writing skills.
- Students are expected to maintain full-time enrollment in each of two semesters at some time prior to transfer.

UCB College of Engineering
Students interested in the majors offered by the College of Engineering should note that the lower-division programs are similar in all curricula. In addition to engineering courses, students are required to take mathematics, chemistry, computer science, biology (for bioengineering students), and English composition courses.

UCB College of Chemistry
Students interested in the majors offered by the College of Chemistry should complete a year of general chemistry lecture and laboratory as well as mathematics, physics and English composition courses. In addition, chemical engineering students should complete a computer programming course for science and engineering students.

UCB College of Environmental Design
Students interested in the majors offered by the College of Environmental Design should complete all prerequisite courses and required units by the end of the preceding spring term.

UCB College of Natural Resources
Students are screened for completion of major prerequisites and content of the application essay. Students should use the essay to discuss their educational and career objectives in relation to their intended major.

Transfer to private colleges and universities
Each year many DVC students go on to pursue their fields of interest and earn their degrees at private four-year institutions. Admissions requirements and general education requirements vary from college to college. To make transferring to a private or independent college as smooth as possible, students should contact the school directly as soon as possible. The Transfer Center can provide assistance with making contact.

Diablo Valley College Catalog 2006-2007 • Transfer

53
CSU general education requirements

At the time this catalog went to press, CSU had not approved the G.E. list for 2006-2007. The information on these two pages is the list that was approved for 2005-2006 and is subject to change. Please check with the counseling department for up-to-date information. The current CSU G.E. list may be found at www.assist.org.

### CSU general education requirements

Note: A course may be listed in more than one area, but it may be used to satisfy only one subject requirement except in U.S. History, Constitution and American Ideals.

#### A. Language and reasoning

Complete 9 units (one course from A-1, A-2 and A-3). A grade of “C” or higher is required.

1. Oral communication
   - Course requirement - 3 units
   - Speech 120

2. Written communication
   - Course requirement** - 3 units
   - English 122
   - **(AP English Language and Composition or English Literature and Composition exams with score of 4 or 5 may be used for A-2.)

3. Critical thinking
   - Course requirement - 3 units
   - Complete one course from:
     - English 126
     - History 122
     - Philosophy 130
     - Sociology 122
     - Speech 121

#### B. Natural sciences (including mathematics)

At least 3 units from B-1, at least 3 units in B-2, at least one lab course to meet B-3, at least 3 units in B-4. Courses that meet the laboratory requirement are noted below by an asterisk (*) beside the number.

1. Principles of physical science
   - Course requirement ** - 3-5 units
   - Complete one course from:
     - Astronomy 110 (add 130* for lab), 120 (add 130* for lab), 128*
     - Chemistry 106*, 108*, 109*, 120*, 121*, 226*, 227*
     - Geography 120 (add 121* for lab), 140 (add 141* for lab)
     - Geology 120 (add 122* for lab), 121 (add 124* for lab), 125
     - Physical Science 112

   Physics 110 (add 111* for lab), 113, 120*, 121*, 129*, 130*, 230*, 231*
   - **(AP Chemistry exam with a score of 3, 4, or 5 may be used for B-1 and B-3)
   - **(AP Physics B or C exam with a score of 3, 4, or 5 may be used for B-1 only)

2. Principles of biological science
   - Course requirement** - 3-5 units
   - Complete one course from:
     - Anthropology 115, 140 (add Anthropology 141L* for lab)
     - Biological Science 101 (add Oceanography 110* for lab), 102*, 116, 117*, 119*, 120*, 126*, 130*, 131*, 139*, 140*, 146*, 160*, 170, 205*
     - Oceanography 109 (add Oceanography 110* for lab)
   - **(AP Biology exam with a score of 3, 4, or 5 may be used for B-2 only.)

3. Laboratory activity
   - Course requirement:
     - One course in B-1 or B-2 must be a laboratory course.
     - Courses that meet the lab requirement are designated by an asterisk (*) following the course number.

4. Mathematical concepts, quantitative reasoning and applications
   - Course requirement** - 3-4 units
   - A grade of “C” or higher is required.
   - Complete one course from:
     - Business 240
     - Mathematics 121, 124, 135, 142, 181, 182, 183, 191, 192, 193, 194, 195, 292, 294
   - **(AP Mathematics Calculus AB or BC or Statistics with a score of 3, 4, or 5 may be used for B-4.)

#### C. Arts, literature, philosophy and foreign languages

Complete at least 9 units

Complete at least one 3 unit course in the Arts (C-1), one 3 unit course in the Humanities (C-2), and 3 units from C-1 and/or C-2, for the total requirement of 9 units.

1. Arts
   - Course requirement - 3-6 units
   - Complete one or more courses from:
     - Architecture 120, 121, 130, 155, 160
     - Art 105, 120, 126, 140, 152, 160,
     - Art History 193, 195, 196, 197, 199
     - Broadcast Communication Arts 140
     - Drama 122, 140, 141, 142, 150, 170, 180, 181
     - English 152
     - Film 140, 160, 180, 280, 281, 282, 283, 284
     - Music 120, 158, 159, 252, 255
Music Literature 110, 111, 112, 113, 114, 115, 116
Music Performance 136, 140, 144, 146, 162, 166, 176, 180, 240, 290
Speech 150

2. Humanities

Course requirement** - 3-6 units
Complete one or more courses from:
Architecture 155, 160
Chinese 121, 220, 221
Drama 142
English 150, 151, 152, 153, 154, 162, 163, 164, 166, 167, 168, 170, 172, 173, 175, 177, 180, 190, 222, 223, 224, 225, 252, 253, 262, 263, 272, 273
Film 160
French 121, 220, 221, 230, 231
German 121, 147, 220, 221, 230, 231
History 120, 121, 124, 125, 126, 127, 128, 129, 130, 135, 136, 140, 141, 150, 151, 160, 170, 171, 240
Italian 121, 147, 220, 221, 230, 231
Japanese 121, 147, 220, 221, 245
Latin 121
Persian 121
Philosophy 120, 122, 141, 220, 221, 224, 225
Russian 121, 220, 221
Sign Language 282
Spanish 121, 220, 221, 230, 231, 250
**(AP English Literature and Composition exam with a score of 5 may also receive 3 units for C-2.)

D. Social and behavioral sciences

At least 9 units required with courses in at least 2 disciplines. A course may be listed in more than one group, but may be counted only once.

D1. Anthropology and archaeology
Anthropology 130, 125, 130, 135, 150

D2. Economics
Economics 101, 200, 220, 221

D3. Ethnic studies
Anthropology 135
History 124, 125, 126, 127, 128, 129, 130, 170, 171
Psychology 140, 141
Social Science 115, 120, 220
Sociology 131, 135

D4. Gender studies
History 170, 171
Social Science 120, 220

D5. Geography
Geography 130

D6. History
History 120, 121, 124, 125, 126, 127, 128, 129, 130, 135, 136, 140, 141, 150, 151, 160, 170, 171, 240

D7. Interdisciplinary social or behavioral science
Gerontology 100
Social Science 110, 111, 115, 120, 123, 162, 163, 220

D8. Political science, government and legal institutions
Political Science 120, 121, 151, 220, 240, 250

D9. Psychology
Early Childhood Education 124
Psychology 122, 140, 141, 160, 210, 220, 230, 240

D10. Sociology and criminology
Administration of Justice 120, 139
Sociology 120, 121, 123, 124, 125, 131, 135, 140

E. Physiological and psychological studies

Course requirement - 3 units
Complete one course from:
Counseling 120
Health Science 124, 170
Nutrition 115, 160
Physical Education-Dance 130, 136, 142
Psychology 122, 160

Graduation requirement in U.S. history, Constitution and American ideals

Course requirements - 6 units

Required for graduation from CSU. Choose one course from Group A and one course from Group B for a total of 6 units:

Group A
History 120, 127, 130, 170
Social Science 120

Group B
History 121, 124, 125, 126, 128, 129, 171
Political Science 121
Social Science 111, 115, 220

(U.S. History, Constitution and American Ideals is considered by CSU to be a statutory rather than a general education requirement.)
“When I first came to DVC I was really scared…but I was even more scared of continuing my life the way it was. I was tired of asking for help, and cleaning houses to make ends meet…I knew that with education I could do much more with my life.

DVC’s amazing student support services helped me get past my fears and I began believing in myself. I am transferring to BYU Hawaii in the fall, and I can’t wait to come back to the Bay Area and get a job helping my Latina community in the way DVC has helped me.

Don’t let fear take your dreams away! If I can do this, anyone can.”

Alma Lara,  
El Salvador
The IGETC is a general education pattern that community college transfer students can use to fulfill lower-division general education requirements in the CSU or many colleges in the UC system without the need to take additional lower-division general education courses after transfer. It is designed for use by California community college students. California community college transfers who have completed transfer units at a CSU, UC or independent college should consult with a counselor to determine if they are eligible to use IGETC.

**IGETC is not advisable for all students planning to transfer.** The IGETC is only one way to fulfill the lower-division general education requirements of the UC or CSU. It is not recommended for certain majors and certain colleges, and some colleges do not accept IGETC. Students pursuing majors that require extensive lower-division major preparation may not find the IGETC option to be advantageous and may be better served by taking courses that fulfill the general education requirements of the UC or CSU college to which they plan to transfer. The IGETC will probably be most useful for students who want to keep their options open before making a final decision about transferring to a particular CSU or UC campus or a particular major. To be certified under IGETC, the entire pattern must be completed prior to transfer. If a student does not complete all the breadth and general education requirements of the IGETC with a grade of “C” or better before transferring, s/he will be subject to the regulations regarding breadth and general education requirements of the school or college of the campus to which they have been admitted.

In rare cases such as illness, unavailable or cancelled courses, military service or unexpected hardships such as family or employment problems experienced in the final term before transfer, students may petition for eligibility to complete IGETC after transfer. A maximum of two courses may be completed after transfer (these courses may not include any courses in areas 1 or 2). Students must petition to the DVC department chair of counseling during the final term before transfer and, if approved, must present proof of approval when requesting partial certification to the Admissions Office at DVC.

The current list of courses approved for meeting IGETC is available in the Counseling Center. Check with your counselor for complete information about whether or not you are eligible for IGETC.

**Reminders:** Students must request that the IGETC certification be sent to the four-year campus that they will be attending. Complete the GE/IGETC request form at the Admissions Office.

CSU and UC applicants must also meet admission, major, prerequisite, and transferable unit requirements.
At the time this catalog went to press, the IGETC list for 2006-2007 had not yet been approved. The information on these pages is the list that was approved for 2005-2006 and is subject to change. Please check with the counseling department for up-to-date information. The current IGETC list may be found at www.assist.org.

Although courses may be listed in more than one area, they may be used to satisfy the requirement in only one area.

### Area 1. English communication

**Course requirement:** 3 courses required, 1 each from group A, B and C.

**1-A. English composition**

**Course requirement** – 3 units, 1 course

English 122

**Note:** AP English language and composition or English literature and composition: Score of 4 or 5 may be used.

**1-B. Critical thinking – English composition**

**Course requirement** – 3 units, 1 course

Complete 1 course from:

- English 126
- History 122
- Philosophy 130
- Sociology 122
- Speech 121+

**1-C. Oral communication**

**Course requirement** (CSU only) – 3 units, 1 course

Speech 120

**Note:** 1-C is a CSU requirement only. Students transferring to UC do not have to meet the Area 1-C, “oral communication” requirement.

### Area 2. Mathematical concepts and quantitative reasoning

**Course requirement** – 3 units, 1 course

Complete 1 course from:

- Business 240+
- Math 124, 135+, 142+, 181, 182+, 183+, 191+, 192+, 193+, 194, 195, 292, 294

**Note:** AP Math Calculus AB, AP Math Calculus BC, or AP Statistics with a score of 3, 4, or 5 may be used for Area 2.

### Area 3. Arts and humanities

**Course requirement** – 9 units, at least 3 courses

This requirement includes taking at least one course from the Arts (3-A) and one from the Humanities (3-B).

**3-A. Arts**

Complete 1 or more courses from:

- Art History 193, 195, 196, 197, 199
- Drama 140, 141, 142, 180, 181
- Film 140, 160, 180+, 280, 281+, 282, 283, 284
- Music Literature 110, 111, 112, 113, 114, 115, 116

**3-B. Humanities**

Complete 1 or more courses from:

- Architecture 155+, 160+
- Chinese 121, 220, 221
- English 150, 151, 152+, 153, 154, 162, 163, 164, 166, 167, 168, 170, 172, 173, 175, 180+, 190, 252, 253, 262, 263, 272, 273
- French 121+, 220, 221, 230, 231
- German 121+, 147+, 220, 221, 230, 231
- Italian 121+, 147+, 220, 221, 230, 231
- Japanese 121+, 147+, 220, 221, 245
- Latin 121
- Persian 121
- Philosophy 120, 122, 141, 220, 224, 225
- Russian 121, 220, 221
- Spanish 121+, 220, 221, 230, 231, 250

†Courses used to satisfy the CSU US History, Constitution and American Ideals requirement may not be counted in Area 3.

### Area 4. Social and behavioral sciences

**Course requirement** – 9 units, at least 3 courses

Complete at least 3 courses from at least 2 disciplines †:

- Administration of Justice† 120
- Anthropology 120, 125, 130, 135, 150
- Economics 220+, 221+
- Early Childhood Education† 124
Area 6. Language other than English  
(UC requirement only)

Students shall demonstrate proficiency in a language other than English in one of the following ways:
• Proficiency equivalent to two years of high school study in the same language. (A junior or senior high school transcript or approved test score must be on file in the Admissions Office.)
  or
• Must have successfully completed one of the following foreign language courses:
  Chinese 120
  French 120
  German 120+, 146+
  Italian 120+, 146+
  Japanese 120+, 146+
  Latin 120
  Persian 120
  Russian 120
  Sign Language 281
  Spanish 120+
  or
• Requirement validated by more advanced course.
  Please see a counselor for details on required test scores or other alternatives to demonstrating proficiency.

CSU graduation requirement in U.S. history, Constitution and American ideals

Course requirement – 6 units
CSU, Choose 1 course from Group A and 1 course from Group B for a total of 6 units
Group A
History 120, 127, 130, 170,
Social Science 120
Group B
History 121, 124, 125, 126, 128, 129, 171,
Political Science 121,
Social Science 111, 115, 220

* Course may be listed in more than one area, but shall not be certified in more than one area.
+ Indicates that transfer credit may be limited by either UC or CSU or both. Please consult with a counselor for additional information.

Note: Advanced placement exams – Acceptable scores of 3, 4, or 5 can be used in some areas towards meeting IGETC subject areas as noted in that section. Note that an acceptable score on an English exam may not be used to meet the Critical Thinking - English Composition requirement.
California articulation number (CAN)

The California articulation number (CAN) system is a statewide numbering system independent from course numbers assigned by local colleges. A CAN number signals that participating California colleges and universities have determined that courses offered by other campuses are comparable in content and scope to courses offered on their own campuses, regardless of their unique titles or local identifying numbers.

Students should always check with their campus counselors, articulation officers, or the transfer center director to determine how CAN-designated courses fit into their educational plans for transfer. In addition, students should consult the ASSIST database at www.assist.org for specific information on course agreements. The college staff will help students interpret this information.

This list is subject to change.

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"I took school seriously and my grades were very good. I had always wanted to go to Berkeley and I worked hard for my goal. When my application was denied, I was devastated. I reluctantly enrolled at DVC, since Berkeley promised to admit me as a junior transfer student. After a semester of sulking, I became ashamed of my attitude that I was somehow entitled to a Berkeley education, and that I had been cheated. I gained a profound appreciation for my mother's sacrifices and for my private education. This was a new perspective that I would not have gained if everything had gone according to plan. It scares me to think who I might be right now if my Berkeley application had been accepted.

Carondelet taught me about writing an excellent thesis, but DVC taught me much more about how things worked in the "real world".

Vanessa Bailey
Requirements
for general education, associate degrees and certificates

DVC general education requirements ............................................................................ 63
DVC associate degrees ..................................................................................................... 67
Career/technical certificate programs .............................................................................. 68
CCCD certificate programs and associate degrees ......................................................... 69
DVC general education requirements

DVC general education
DVC requires that all students complete general education course work as part of their associate degree requirements. General education courses ensure that students have breadth of knowledge.

Associate degree general education philosophy
Diablo Valley College encourages all students to have a body of common course experiences, the results of which are known as general education.

We believe that realizing your academic and career goals can best evolve out of studying a broad range of college courses from mathematics to science, language, technology, and the humanities.

We also want to remind you of a wisdom shared among all of these areas of study, across cultures, and through the ages: that seeking and possessing knowledge for its own sake, in addition to more practical motives, is an immensely worthwhile endeavor.

Moreover, we believe that all academic disciplines are related and, taken together, best prepare you to interact in our world.

The faculty’s goal is for students to acquire the following lifelong skills and abilities:

The ability to:
• write clearly and read critically;
• use scientific reasoning to understand the physical and biological world and how we affect it;
• adapt to change by being flexible, curious, and open to new experiences;
• understand oneself and others in relationships.

The knowledge of:
• the applications of mathematical concepts;
• U.S. history and government;
• information technology;
• the connections across disciplines.

The skills in:
• critical thinking and problem solving;
• effective interpersonal oral communication;
• economic survival in the culture and structure of the workplace and marketplace;
• healthful living and wellness in physical, intellectual, emotional, and social dimensions.

The appreciation of:
• the arts, through analysis and participation;
• self and others in a culturally-diverse world;
• how the past, present, and future interrelate on local, national, and global levels;
• ethics, integrity, and our responsibility to contribute to the community.

Reasons for general education objectives for the associate degree

I. Language and reasoning
Students study principles and applications of language leading toward logical thought, clear and precise expression, and critical analysis of communication.

A. English composition
Students learn to:
• write an essay of several paragraphs developing a central idea;
• use written and spoken language to communicate effectively;
• apply principles of critical thinking to reading and writing;
• identify the primary elements of an argument and determine their validity;
• discuss how meaning is created and how symbols are used;
• illustrate how the English language represents and reflects the cultures that use it.

B. Communications and analytical thinking
Students come to understand, command and appreciate the principles of language, as language is symbolic of meaning. These principles are applied through logical thinking, clear and precise expression of concepts, and critical evaluation of expression in a variety of forms.

C. Mathematics comprehension
DVC graduates have gained an understanding and appreciation of the power and beauty of mathematics. They understand mathematical abstraction and generalization and the use of mathematical symbols. They should be able to recognize and examine mathematical relationships in the form of equations, graphs, and tables. They are able to use appropriate technology to help solve mathematical problems. DVC graduates have learned to apply mathematical methods to solve quantitative problems in the sciences, in their vocations, and in their daily lives as citizens and consumers.

II. Natural sciences
In the natural sciences, students study humans as seekers of fact and makers of meaning through abstraction and generalization. By studying disciplines within biological and physical sciences, DVC graduates should be able to:
• understand the basic concepts of biological and/or physical sciences well enough to be able to interpret meaningfully and criticize representative material from the mass media;
• clearly distinguish between opinion based upon preconception and opinion based upon controlled scientific experiment;
• solve scientific problems in contexts other than those in which model problems and solutions are learned.
III. Arts and humanities
Students study the human experience as it is reflected and shaped by the arts. The faculty believes DVC graduates should be able to:

- critically examine the function, media, subject matter, organization, style, and relative excellence of representative examples of two or more arts;
- show relationships between the ways people live and the art forms they create. These instances should be from different times and cultures;
- demonstrate their own ideas of aesthetic and ethical standards by engaging in an art as an originator, adapter, interpreter, or performer.

IV. Social and behavioral sciences
Using the disciplines of anthropology, sociology, psychology, history, political science and economics, students study the complexity of human behavior, the process and rate of social change, the historical backgrounds of current social behavior, and the diversity of cultural traditions. The faculty believes DVC graduates should be able to:

- demonstrate an understanding of the complexity of social phenomena by using two or more social sciences;
- discuss the scope and function of national, state, and local institutions, including the family, school, government, and church;
- recognize points of view and their assumptions;
- criticize generalizations in light of relevant evidence.

V. Physiological and psychological studies
Students should increase their understanding of the human as an integrated physiological, social and psychological organism.

A. Ecology of human health
The faculty believes that development and maintenance of personal and community health is basic to all endeavors of DVC graduates as workers, lifelong learners and citizens. To this end the health requirement will enable students to:

- develop an awareness of the dimensions of health and their interrelationships: physical, mental, intellectual, social, environmental, and spiritual;
- develop life skills to promote health and prevent disease;
- understand the primary structures and functions of the human body as it relates to health and disease processes;
- evaluate health care services, information, and products.

B. Interpersonal relationships
The faculty envisions that our graduates will:

- have a reasonably clear perception of their own psychological makeup as well as that of others, understanding both unique traits and behaviors shared in common;
- apply psychological principles of behavior with self-awareness in making sound life choices, enhancing individual functioning and the quality of relationships;
- recognize sources of help for psychological difficulties and interpersonal conflicts, and bring empathy to the interpretation of human behavior;
- use scientific methods to evaluate data, psychological theories, and observations from everyday life, so as to distinguish that which illuminates human behavior and that which distorts it.

C. Physical education
The faculty believes DVC graduates should be able to:

- develop and evaluate optimum muscular strength and endurance, flexibility, cardiovascular fitness, and a personal sense of wellness;
- develop individual skills in specific activities with potential for lifelong leisure time participation;
- participate in activities that promote creative expression, relaxation and reduce stress;
- develop knowledge and understanding of physical activity, encourage appropriate health practices, and communicate the value of an active lifestyle to quality of life.

VI. Multicultural studies requirement
Students study contributions from various cultures to prepare to live in a diverse society. Through close examination of such things as art, society, history, and culture, students gain knowledge of experiences and perspectives other than their own, increasing their tolerance, respect for, and interaction among people from multiple cultures.

VII. Information literacy
Information literacy is the ability to both recognize when information is needed and to locate, evaluate, synthesize, use and communicate information in various formats. The faculty believes DVC graduates should be able to:

- recognize when information is necessary;
- develop effective research strategies;
- locate, retrieve and use information in a variety of formats;
- critically evaluate, and synthesize information;
- effectively create, present and communicate information;
- competently use computers and other information technology tools;
- understand the social, legal and ethical issues relating to information and its use.
DVC General education requirements

These are the 2006-2007 DVC G.E. requirements and are subject to change. Please check with the counseling department for up-to-date information or visit www.dvc.edu.

I. Language and reasoning

A. English composition
   Course requirement - 3 units
   Complete with a "C" grade or better:
   English 122
   (AP English Language and Composition or English Literature and Composition with a score of 4 or 5, the course requirement will be waived)

B. Communications and analytical thinking
   Course requirement - 3-4 units
   Complete one course from:
   Business 240, 250, 255
   Computer Science 110
   English 126
   History 122
   Mathematics 124, 135, 135SP, 142, 181, 182, 183, 191, 192, 193, 194, 195, 292, 294
   Philosophy 130
   Sociology 122
   Speech 121
   (AP Mathematics Calculus AB or BC or Statistics with a score of 3, 4, or 5, the course requirement will be waived)

C. Mathematics comprehension
   Course requirement - 0-4 units
   Satisfy either 1) or 2) below.
   1) Complete one of the following courses with a grade "C" or better, or transfer credit for an equivalent course from another accredited college or university.
      Business 240
      Engineering 111
      Mathematics 110, 110SP (4 units), 114, 120, 120SP (4 units), 121, 124, 125, 135, 135SP (3 units), 142, 181, 182, 183, 191, 192, 193, 194, 195, 292, 294
   2) Satisfy one of the following:
      • Receive a "C" grade or better in the second term of a two-term course in high school algebra.
      • Score at least 400 on the SAT Math test.
      • Score 22 or above on the math section of the ACT test.
      • Pass any of the CLEP math exams.
      • Score 3, 4, or 5 on AP Math Calculus AB or BC or Statistics.

II. Natural sciences
   Course requirement - 3-5 units
   Complete one course from:
   Astronomy 110, 120, 128
   Biological Science 101, 102, 116, 117, 130
   Chemistry 106, 108, 109, 120
   Geography 120, 140
   Geology 120, 121, 125
   Oceanography 101
   Physical Science 112
   Physics 110, 113, 120, 121, 129, 130
   (AP Biology or Chemistry or Physics B or Physics C with a score of 3, 4, or 5, the course requirement will be waived)

III. Arts and humanities
   Course requirement - 3-4 units
   Complete one course from:
   Architecture 155, 160
   Art 156
   Art History 193, 195, 196, 197, 199
   Broadcast Communication Arts 140
   Drama 140, 141, 142, 170, 180, 181
   English 150, 152, 154, 162, 163, 164, 166, 167, 168, 170, 172, 173, 175, 177, 180, 190, 252, 253, 262, 263, 272, 273
   Film 140, 160, 180
   Music Literature 110, 111, 112, 113, 114, 115, 116, 117, 118

Note: Students are responsible for notifying the Admissions Office if the requirement is met by submitting the proper documents.
IV. Social and behavioral sciences

Course requirements - 6 units

Complete one course from Group A and one course from Group B for a total of 6 units:

**Group A**
- History 120, 127, 130, 170
- Political Science 120, 220, 240, 250
- Social Science 110, 115, 120
- Special Education 102

**Group B**
- History 121, 124, 125, 126, 128, 129, 171
- Political Science 121
- Social Science 111, 220
- Special Education 101

V. Physiological and psychological studies

A. Ecology of human health

Course requirement - 3 units

Complete one course from:
- Health Science 124, 170
- Nutrition 115

**Note:** The course requirement may be waived for certain health science majors. When waived for religious purposes, the student must substitute a nutrition or biological science course other than one used to meet the basic science requirements. Affiliation with a religion which denies physical causes of diseases must be verified through the Admissions and Records Office.

B. Interpersonal relationships

Course requirement - 3 units

Complete one course from:
- Psychology 122, 140, 141, 160

C. Physical education

Course requirement - 2 units

(Courses may vary in units.)

Complete one or more of: the physical education activity, adaptive, combative, dance, or intercollegiate athletics courses to meet the PE requirement.

**Note:** Physical education theory courses may not be used.

VI. Multicultural studies

Course requirement - 0-3 units

(Asterisked courses listed below also appear in categories I through V. They may simultaneously fulfill two requirements. However, the units are only counted once.)

- Addiction Studies 155
- Administration of Justice 120, 130
- Anthropology 120, 135
- Culinary Arts 228
- Drama 142*
- English 162*, 168*, 170*, 173*, 177*, 190*, 225, 262*
- Film 160*
- History 124*, 125*, 126*, 127*, 128*, 129*, 130*, 170*, 171*
- Humanities 115*
- Music Literature 112*, 114*, 115*, 116*
- Psychology 140*, 141*
- Social Science 115*, 120*, 220*
- Sociology 125, 131, 135

VII. Information literacy

Course requirement 0-1 unit

Complete course:
- Library Studies 121

Total general education units = 27-38
Total units required for AA/AS degree = 60
DVC offers associate degrees in arts and science. These degrees offer students specific general education requirements, major requirements and elective opportunities.

Goals of DVC's associate degrees
The goals of DVC's associate degrees are:
- the development of college-level skills;
- the acquisition of basic principles in the major disciplines and methods of discovery and problem solving;
- the formation of insights from several disciplines in order to make better-informed decisions;
- an appreciation of our multicultural heritage;
- an understanding of the values we hold so that we may use them to examine and guide our life choices.

Associate degree general information
The completion of the associate in arts or science degree provides students with strong academic skills and a broad in depth general education. Students may explore their interests by selecting from a different major emphasis and electives as well as completing required general education classes. Associate degrees are college and state approved and accredited programs.

Nondegree-applicable courses
Units from courses numbered below 100 cannot be applied to the degree. Nondegree applicable course grades will not be included in calculating GPA for a degree.

Meet with a counselor
We cannot stress enough the importance of consulting with a counselor before selecting classes. Counselors help students discover and examine all their available choices including petitioning for exemption from courses whose requirements the student may have already met.

Credit by exam
Students may petition to receive alternatives to course credit such as advanced placement (AP) or challenge examinations. Please refer to the “academic policy” section for specific information on these alternatives.

Graduation
Students must file a special application in the Admissions Office to obtain their degree. Diplomas are mailed at the end of each term. Graduation ceremonies are held annually at the end of spring term.

Associate degree requirements for returning students (catalog rights)
Former DVC students who have not been enrolled at DVC for the last ten years may choose to follow the degree requirements published in the catalog that is/was in effect: (1) at the time of re-entry; or (2) when an application for their degree is filed.

Former DVC students who have re-entered or who have filed an application for a degree within a ten-year period from their last date of enrollment may choose to follow the degree requirements published in the catalog that is/was in effect: (1) at the time of their original entry; or (2) at the time they re-enter; or (3) when an application for their degree is filed.

Associate degree requirements for entering students
These requirements apply to students entering DVC in the summer term 2006 or thereafter.

To be awarded the associate degree students must:
- complete the 27-38 units of general education and major requirements plus electives for a minimum of 60 units (excluding units earned in courses numbered below 100.) Only one of English 116 or 118 may be applied to requirements for the associate degree;
- achieve a “C” or better in the courses used to meet in the English composition and mathematics comprehension requirements;
- complete at least 12 units of degree applicable course work at DVC;
- maintain at least an overall BPA of 2.0 in degree applicable course work;
- complete at least 18 units in a selected major.
Offering more than 30 certificate programs and over 40 certificates, DVC provides students with the educational background and training they need to achieve their career goals. By completing a certificate program, students can show employers that they have acquired the most appropriate and up-to-date skills. Technology is changing the way we live and perform our jobs. Staying on top of these changes is an important priority. DVC’s excellent reputation is a distinct advantage to our students as they compete in today’s demanding job market.

Certificate programs vary in length and most require less than two years of full-time study to complete a certificate. Most certificate programs may be completed on a part-time basis. DVC offers two types of certificates; a certificate of achievement requires 18 units of study or more, while a certificate of completion requires 17.5 units or less. In some cases, courses completed in a certificate program can be applied to a degree program.

Students who successfully complete their certificate course work must apply to the Admissions Office to receive their certificate. To qualify for a certificate, students must complete at least twenty-five percent of the required courses at DVC. Students must also maintain a grade point average of “C” (2.0) or better in the certificate’s required courses. Some certificates require a higher grade point average in required courses. See specific program description for details.

Students who would like help in planning for their career or profession should seek the advice of a counselor or program advisor. DVC offers a wide range of educational opportunities and the counseling department is available to help students carefully plan a course of study that takes into consideration personal interests, aptitudes and experiences. Studies show that careful planning will help to ensure students’ college and future success.
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### CCCCD certificate programs and associate degrees

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<tr>
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<td><strong>Household Survival: Maintenance and Repair</strong></td>
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*This program is offered in collaboration with Ohlone College, which grants the degree.

New programs are constantly under development, check the college web site for the most current list – [www.dvc.edu](http://www.dvc.edu)
“By my senior year in high school, I was so tired of the structure and social aspects of high school that walking away was an easy decision. I never gave up on my desire to learn, but the structure of high school didn’t work for me.

After a few years of working, I cautiously gave education a second chance. My classes at DVC were much harder than I expected, but the challenge inspired me. After four years of the hardest college work I’ve done, I earned my associate degree.

I am the most proud of my associate degree even though I went on to earn a bachelor’s degree and two master’s degrees in education. DVC represented a chance for me to do it again and do it right. Learning was finally fun because I could explore and discover my own interests.

I now have the privilege of working as principal of Martinez Vicente and Briones alternative high schools in Martinez. I promote DVC on a daily basis to my students, both as a high-quality educational experience and as a way to turn their lives around. And in surprising numbers, they enroll! I just love to see DVC do for them what it did for me. It is a rewarding way to give back to my community.”

Matt Smith
Programs and course descriptions

Accounting .......................................................... 101
Addiction studies .................................................. 75
Administration of justice ........................................ 79
Alternative energy technology ................................. 83
Anthropology ........................................................ 83
Arabic ................................................................. 85
Architecture .......................................................... 86
Art ...................................................................... 87
Art history ............................................................. 91
Astronomy ............................................................. 92
Biological science .................................................. 93
Broadcast communication arts ................................ 96
Business ............................................................... 99
Business accounting .............................................. 101
Business graphics ................................................... 103
Business information management ......................... 104
Business management ............................................ 106
Business marketing ............................................... 108
Business real estate ................................................ 109
Career development .............................................. 111
Chemistry .............................................................. 112
Chinese ............................................................... 113
Colloquia ............................................................. 114
Computer information systems ............................... 114
Computer networking technology ......................... 115
Computer science .................................................. 117
Computer technical support .................................. 122
Construction ........................................................ 124
Cooperative education ......................................... 126
Counseling ........................................................... 127
Culinary arts ........................................................ 128
Dental assisting ..................................................... 132
Dental hygiene ...................................................... 135
Dental laboratory technology ................................ 140
Drama ................................................................. 142
Early childhood education ..................................... 144
Economics ............................................................ 152
Education ............................................................. 153
Electricity ............................................................. 153
Electronics ........................................................... 153
Engineering and engineering technology ................. 155
English as a second language ................................ 160
English ............................................................... 162
Family life education (see Early childhood ed.) ...... 167
Field studies ........................................................ 167
Film .................................................................... 167
French ................................................................. 170
Geography .......................................................... 171
Geology ............................................................... 174
German ............................................................... 175
Gerontology .......................................................... 177
Health science ...................................................... 177
History ............................................................... 179
Horticulture ........................................................ 181
Hotel restaurant management (see Culinary Arts) .... 181
Humanities .......................................................... 187
Italian ................................................................. 188
Japanese .............................................................. 190
Journalism ........................................................... 191
Latin ................................................................. 192
Learning skills ...................................................... 193
Liberal arts ........................................................... 194
Library studies ...................................................... 194
Machine technology ............................................. 197
Mathematics ........................................................ 198
Multimedia .......................................................... 202
Music ................................................................. 206
Music literature ..................................................... 212
Music performance ............................................. 213
Nutrition .............................................................. 215
Oceanography ..................................................... 217
Persian ............................................................... 217
Philosophy ........................................................... 217
Photography ........................................................ 219
Physical education ................................................. 219
Physical education adaptive ................................... 223
Physical education combative ................................ 224
Physical education dance ....................................... 225
Physical education intercollegiate ......................... 227
Physical education theory ..................................... 229
Physical science ..................................................... 234
Physics ............................................................... 235
Plumbing ............................................................. 236
Political science .................................................... 238
Portuguese .......................................................... 239
Psychology .......................................................... 239
Real estate ........................................................... 240
Respiratory therapy .............................................. 240
Russian ............................................................... 241
Sign language ....................................................... 242
Social science ....................................................... 243
Sociology ............................................................ 244
Spanish ............................................................... 246
Special education ................................................ 248
Speech ................................................................. 249
Sports medicine/athletic training (see Physical ed) ... 250
Steamfitter .......................................................... 251
Supervised tutoring ............................................. 253
Tagalog .............................................................. 254
Transfer studies .................................................... 254
Women's services ............................................... 255
Work experience (see Cooperative education) ......... 255
Understand the course descriptions

Course descriptions and numbering
The courses listed in our catalog may not be offered every term or every year. Check the schedule of courses for the course offerings for the current term.

Course numbering
Course descriptions with numbers below 100 are not college level (degree applicable) courses and do not apply as credit toward the associate degree. Courses with numbers between 100 and 299 are generally freshman and sophomore level college courses. Students should carefully review each specific course description to ensure that the selected courses will satisfy requirements for his or her transfer, degree or certificate goals.

Prerequisites
When a course description lists a prerequisite, it means that the prerequisite must be successfully completed before the student may enroll in that course. When a course description lists a corequisite it means that students must be concurrently enrolled in both corequisite courses.

If a student has completed the prerequisite at another college, he or she must request to have an official transcript sent to the Admissions Office before registration. For complete information about prerequisites and corequisites please refer to the “Academic Policy” section of this catalog.

Recommendations
Students are advised to complete the recommended course or courses before enrolling in the selected course. Recommendations increase the student’s ability to succeed.

Course codes
The course descriptions in this catalog and in the schedule of courses use codes to identify grading, transferability, and repeatability options. These codes are defined as follows:

CR / NC - The course may only be taken for a credit / no credit grade.
LR - The course may only be taken for a letter grade.
SC - Students may choose CR / NC grading before the sixth week of the term. If they do not choose credit / no credit grading, a letter grade will be issued. For a short course, students must choose the grading method before they have completed 30 percent of the course. For more information, see the College Policies section of this catalog.

California articulation number (CAN)
When a California articulation number appears at the end of a course description, it means that this lower-division introductory course corresponds to a course taught in other two- and four-year colleges in California. Credit for a course with a particular CAN may be transferred to a participating college and used in lieu of a course with the same CAN at that college. Participating colleges and universities display these numbers in their catalogs, along with their own course number, title, and description. Some courses may still be awaiting CAN approval as this catalog goes to press. For the most up-to-date information, contact a counselor or the Transfer Center.

CSU transferable (CSU)
Courses identified with the CSU code at the end of the description are transferable to campuses of the CSU system. However, they may only be transferable as an elective. Students should check with their counselor or the Transfer Center for complete information about the transferability of courses toward meeting general education breadth requirements or major requirements.

UC transferable (UC)
DVC offers many courses that are transferable to all UC campuses. A course must be on the transfer course agreement (TCA) at the time it is taken to be transferable to UC. Courses identified with a UC code at the end of the description are transferable. Lists of UC transferable courses are available at www.assist.org.
Accounting

See Business Accounting - BUSAC

Addiction studies – ADS

Diablo Valley College is approved by the California Board of Registered Nurses for continuing education credits. All ADS courses can be used. (Provider # CEP 7992).

Biological and Health Sciences Division
Dean of Biological and Health Sciences
Science Center 102
925-685-1245 x 2442

Possible career opportunities

Addiction studies students develop an in-depth understanding of the addiction process and how to motivate someone towards positive change. The addiction counseling certificate prepares students for a career as a substance abuse counselor, community services worker, or an addiction/prevention intervention educator.

Associate in science degrees
Addiction counseling

Certificates of achievement
Addiction counseling
Addiction studies

Associate in science degree - Addiction counseling

The associate degree program in addiction counseling provides students with the academic preparation needed for employment in the addiction counseling field. Earning this degree may also facilitate the student's transfer to a four-year college or university. Students who wish to transfer must consult with program faculty and college counselors to insure that the requirements for transfer to appropriate institutions are met. To earn an associate in science degree, students must complete each course used to meet a major requirement with a "C" grade or better.

ADS 154* Dual Disorders
ADS 155 Diverse Communities and Social Services
ADS 163 Pharmacology and Medical Aspects of Alcohol and Other Drugs
ADS 168* Group Leadership
ADS 170 Introduction to Codependency and Family Issues
ADS 171* ADS Field Work 1
ADS 172* ADS Field Work 2

Total units for the major 37.5

Electives

Total units for the degree 61.5-72.5

*The above courses have specific prerequisites. See course descriptions for details.

To assist students in planning their schedules, Diablo Valley College has prepared a list of courses to be offered at a minimum each semester. This list is subject to change due to fiscal constraints and availability of staff and/or facilities, but it should help you in planning your schedule. By scheduling your classes according to this course sequencing guide, you will be able to finish the major requirements/certificate of achievement in addiction counseling requirements in two to three years, depending on the number of units you take each semester.

Verify offerings with college counselors, program faculty, and the on-line schedule of classes. Students starting the program in a spring or summer semester should meet with a counselor or program advisor to plan their schedule.

Addiction counseling course sequence

X= semester offered

recommended sequence

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Diablo Valley College Catalog 2006-2007 • Programs and course descriptions
Addiction studies

Associate in science degree - Addiction studies

The associate degree program in addiction studies provides students with a broad general education while integrating an in-depth exploration of the skills and knowledge required to work with people who have addiction problems. This degree will contribute significantly to those who want to work in occupational fields such as social services, criminal justice, youth services, education, clergy, nursing, and human resources. Earning this degree may also facilitate the student’s transfer to a four-year college or university. Students who wish to transfer must consult with program faculty and college counselors to insure that the requirements for transfer to appropriate institutions are met. ADS 155 satisfies both a major and a DVC general education requirement, however the units are only counted once. To earn an associate in science degree, students must complete each course used to meet a major requirement with a “C” grade or better.

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</table>

Total units for the degree 60

Certificate of achievement - Addiction counseling

The addiction counseling certificate provides students with the academic preparation needed for employment in the addiction counseling field. Upon completing this certificate, a student may apply for any of the state recognized professional credentials offered by the following organizations: California Association of Alcoholism and Drug Abuse Counselors (CAADAC), California Association of Alcohol and Drug Educators (CAADE), and the California Association of Addiction Recovery Resources (CAARR). Each of these certificates has additional testing and/or field practicum hours required, but all of the educational coursework is completed when you finish the addiction counseling certificate at DVC.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better. Required courses are primarily available in the evening and late afternoon. Although students may start during any semester and progress at their own pace, completion of the certificate will take approximately four semesters.

Total units required 37.5

*The above courses have specific prerequisites. See course descriptions for details.

For recommended sequence of study, see major requirements for A.S. degree in Addiction Counseling above.
Certificate of achievement - Addiction studies

The addiction studies certificate is for students who want a specialized focus in addiction, treatment and recovery but are not preparing to become an addiction counselor. This certificate may be useful for teachers, human services personnel, or community service personnel who want to have a deeper understanding of the addiction process.

Important note: Once this certificate is completed, if you choose to continue in the addiction studies program, you may apply these units towards the more in-depth addiction counseling certificate. When a student has enough units to earn either certificate, they need to fill out an “application for a certificate” form during the semester in which they will complete the units. This form must be picked up and turned in to the Admissions Office. If the form is not filled out, a student will not receive the certificate from the college even if they have completed all the units.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better. Required courses are primarily available in the evening and late afternoon. Although students may start during any semester and progress at their own pace, completion of the certificate requirements will take a minimum of two semesters.

<table>
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<th>Required courses</th>
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<tr>
<td>ADS 101 Introduction to Substance Abuse and Treatment</td>
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<tr>
<td>ADS 102 Introduction to Motivational Interviewing Skills</td>
<td>3</td>
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<tr>
<td>ADS 152* Relapse Prevention</td>
<td>3</td>
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<tr>
<td>ADS 154* Dual Disorders</td>
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</tr>
<tr>
<td>ADS 155 Diverse Communities and Social Services</td>
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</tr>
<tr>
<td>ADS 163 Pharmacology and Medical Aspects of Alcohol and Other Drugs</td>
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</tr>
<tr>
<td>ADS 170 Introduction to Codependency and Family Issues</td>
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<tr>
<td><strong>Total units required</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

*The above courses have specific prerequisites. See course description for details.

For recommended sequence of study, see major requirements for A.S. degree in Addiction Studies above.

ADS-102 Introduction to Motivational Interviewing Skills
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course provides an overview of motivational interviewing and the stages of change. Essential communication and charting skills needed for working in the substance abuse and chemical dependency field will be explored. CSU

ADS-103 Group Process
2 units SC
36 hours lecture per term
Prerequisite: ADS 101 or equivalent and ADS 102 or equivalent
Recommended: ADS 151 or equivalent, ADS 170 or equivalent
This course provides an introduction to the dynamics of group interaction in working with people with histories of substance abuse, co-dependence, and other addictive behaviors. Students will gain theoretical understanding of group process and dynamics, experience group membership, and demonstrate their ability to function in a group. CSU

ADS-150 Topics in Addiction Studies
3-4 units SC
May be repeated three times
Variable hours
Recommended: eligibility for ENGL 122 or equivalent
A supplemental course in addiction studies to provide a study of current concepts and problems in addiction studies and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

ADS-151 Ethical and Legal Concerns for ADS Paraprofessionals
1.5 units SC
27 hours lecture per term
Prerequisite: ADS 101 and 102 (ADS 102 may be taken concurrently)
This course is designed to familiarize ADS paraprofessionals with the legal and ethical issues involved in alcohol/drug counseling. CSU

ADS-152 Relapse Prevention
3 units SC
54 hours lecture per term
Prerequisite: ADS 101 or equivalent and ADS 102 or equivalent (may be taken concurrently)
This course examines the research that describes the progressive and predictable warning signs of relapse in addicts and alcoholics. Students will study and practice skills and techniques used to develop a relapse prevention program. CSU
ADS-154 Dual Disorders
3 units SC
54 hours lecture per term
Prerequisite: ADS 101 or equivalent
This course addresses the common preexistent or concurrent psychiatric disorders that may surface in the area of substance abuse. The relationships between mental health and substance abuse facilities will be examined. CSU

ADS-155 Diverse Communities and Social Services
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
Note: meets the State Department of Social Services licensing requirement for DDS III, Program and Curriculum Development
This course investigates the impact of health status, lifestyle/behavior patterns and personal and cultural beliefs, on individual and group access to social services. Groups studied will include Asian Americans, African Americans, Hispanic/Latino Americans, Native Americans, and Pacific Rim cultures, among others. The course will examine in detail effective strategies for cross and intercultural work in social services, with particular emphasis on addiction prevention, intervention, and treatment services. CSU

ADS-163 Pharmacology and Medical Aspects of Alcohol and Other Drugs
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course provides an in-depth look at physiological effects and medical consequences of alcohol and other drugs. How drugs are metabolized, their effects on body systems and behavior, the addictive process, and current research are covered. CSU

ADS-168 Group Leadership
2 units SC
36 hours lecture per term
Prerequisite: ADS 101 or equivalent, ADS 102 or equivalent, ADS 103 or equivalent
Recommended: ADS 151 or equivalent, ADS 170 or equivalent
This course explores the theory and practice of group facilitation. Students will study and develop the basic observation and communication skills needed for leading support groups. Administrative tasks related to group leadership responsibilities will also be examined. CSU

ADS-169 Field Work: Discussion and Analysis
3 units SC
May be repeated once
54 hours lecture per term
Prerequisite: ADS 101, 102, 170, and 151 (ADS 151 may be taken concurrently)
Co-requisite: CARDV 130 and COOP 170A (COOP 170A may be taken concurrently)
This is a two-semester requirement of the Alcohol/Drug Studies Certificate Program. It provides discussion and analysis of the internship experience in comprehensive alcohol/drug prevention, intervention, detoxification, residential recovery, and outpatient counseling programs. CSU

ADS-170 Introduction to Codependency and Family Issues
3 units SC
54 hours lecture per term
Recommended: ADS 101 or equivalent; eligibility for ENGL 122 or equivalent
This course is an examination of biological, psychological, and sociological issues relevant to family functioning, with a focus on chemically dependent families. Included in this is a close examination of codependency and family system variables, such as family structure, communication, and emotional closeness. CSU

ADS-171 ADS-Field Work I
5.5 units SC
54 hours lecture / 144 hours laboratory by arrangement per term
Prerequisite: ADS 101 or ADS 102 or ADS 170 or equivalent
Co-requisite: ADS 151 or equivalent (may be taken previously)
Note: formerly a seven unit block consisting of ADS 169, CARDV 130 and COOP 170A
This is the first clinical course required for the addiction counseling certificate. Students will have the opportunity to work in community clinical settings that serve clients with substance abuse problems. They will gain firsthand experience and develop clinical competency in assessment, treatment planning, group facilitation, record-keeping, and general agency procedures. The course will consist of seminar and clinical experiences. Students will have supervision on-site, and then debrief their experiences with fellow students, sharing the learning as well as the challenges of providing substance abuse services in a community clinic setting. Additionally students will explore possible locations for employment and interviewing skills. They will also develop skills in treatment planning and understanding all the necessary requirements for state and other professional certification. CSU

ADS-172 ADS-Field Work II
5.5 units SC
54 hours lecture / 144 hours laboratory by arrangement per term
Prerequisite: ADS 171 or equivalent
Note: formerly a seven unit block consisting of ADS 169, CARDV 130, and COOP 170A
This is the second clinical course required for the addiction counseling certificate of achievement. Students will have the opportunity to work in community clinical settings that serve clients with substance abuse problems. They will gain firsthand experience and develop clinical competency in group facilitation, case-management, and system approaches to addiction treatment in a community setting. The course will consist of seminar and clinical experiences. Students will have supervision on-site, and then debrief their experiences in class, sharing both the learning and the challenges. Students will also prepare for state certification and employment. CSU
Administration of justice – ADJUS

Social Sciences Division
Lyn Krause, Dean
Faculty Office 134
925-685-1230 x 2518

Possible career opportunities
Law enforcement study prepares students for a career as a: police officer, sheriff, California Highway Patrol Officer (CHP), Federal Bureau of Investigation Agent (FBI), Drug Enforcement Administration Agent (DEA), Secret Service Agent, U.S. Border Patrol Agent, Fish and Game Warden, or Customs Agent. Corrections study prepares students for a career as a correctional officer, parole officer, probation officer, youth counselor, prison warden, or criminologist. A pre-law specialization prepares students for further study towards the advanced degree required to become a: lawyer, district attorney, public defender, defense lawyer, prosecutor, judge or bailiff.

Associate in science degree
Administration of justice

Certificate of achievement
Administration of justice

Certificates of completion
Community relations specialist
Correctional specialist
Crime scene investigator
Criminal law specialist
Juvenile counseling
Patrol specialist

Total units for the major 28-30
Total units for the degree 60-65

general education requirements .......................................................... 27-38
major requirements
ADJUS 120 Introduction to the Administration of Justice... 3
ADJUS 121 Criminal Law................................................................. 3
ADJUS 122 Criminal Procedure................................................... 3
ADJUS 124 Elements of Corrections........................................... 3
ADJUS 130 Police Multicultural Relations................................. 3
ADJUS 221 Criminal Evidence .................................................. 3
ADJUS 284 Interviewing and Counseling.................................. 3

plus at least 7-9 units from:
ADJUS 125 Report Preparation for Criminal Justice......... 3
ADJUS 139 Gangs and Threat Groups in America......... 3
ADJUS 203 Physical Evidence and the Crime Laboratory ... 4
ADJUS 222 Criminal Investigation............................................. 3
ADJUS 230 Juvenile Procedures................................................. 3
ADJUS 260 Patrol Procedures..................................................... 3
ADJUS 270 Personal Self-Defense and Firearms............... 2
ADJUS 280 Probation and Parole.............................................. 3
ADJUS 298 Independent Study................................................... 3

Certificates of completion - Administration of justice
Students wishing to pursue a career in the field of law enforcement, crime scene investigation, probation, parole, corrections, private security, law, criminal behavior studies, rehabilitation programs or the like should consider this two-year program. All students planning to seek employment with a government or private agency after they graduate should speak with a faculty member of the department in order to review the special requirements of the various agencies.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better. Certificate requirements can be completed by attending classes in the day, the evening or both.

required courses
ADJUS 120 Introduction to the Administration of Justice... 3
ADJUS 121 Criminal Law................................................................. 3
ADJUS 122 Criminal Procedure................................................... 3
ADJUS 124 Elements of Corrections........................................... 3
ADJUS 130 Police Multicultural Relations................................. 3
ADJUS 221 Criminal Evidence .................................................. 3
ADJUS 284 Interviewing and Counseling.................................. 3

plus at least 7-9 units from:
ADJUS 125 Report Preparation for Criminal Justice......... 3
ADJUS 139 Gangs and Threat Groups in America......... 3
ADJUS 203 Physical Evidence and the Crime Laboratory ... 4
ADJUS 222 Criminal Investigation............................................. 3
ADJUS 230 Juvenile Procedures................................................. 3
ADJUS 260 Patrol Procedures..................................................... 3
ADJUS 270 Personal Self-Defense and Firearms............... 2
Certificate of completion - Administration of justice - Community relations specialist

This certificate prepares students for entry-level careers either as law enforcement or civilian positions that require a better than average understanding of multicultural issues as they impact the community and the criminal justice system. Anyone contemplating a career in the criminal justice field should consider taking these courses. Citizens active in their community such as teachers, activists, political and social leaders, and members of cultural organizations will find this series of courses an excellent resource in better understanding the issues that impact their communities.

To earn a certificate of completion, students must complete each course used to meet a certificate requirement with a “C” grade or better. Certificate requirements may be completed by a combination of day, evening or weekend courses listed in the Administration of Justice (AJ) Program. Successful completion of the certificate of completion requirements also counts towards the completion of the AJ certificate of achievement.

**Required courses**
- ADJUS 120 Introduction to the Administration of Justice... 3
- ADJUS 130 Police Multicultural Relations ... 3
- ADJUS 139 Gangs and Threat Groups ... 3
- ADJUS 284 Interviewing and Counseling ... 3

**Plus at least 3 units from:**
- ADJUS 280 Probation and Parole ... 3
- ADJUS 286 Correctional Treatment Philosophies ... 3
- ADJUS 298 Independent Study ... 3

**Total units required** 12

Certificate of completion - Administration of justice - Correctional specialist

This certificate prepares students for entry-level careers in corrections such as working in prisons, jails, probation officers, parole agents, and counselors working with adult offenders. Completion of this certificate will greatly improve the opportunity for employment in these fields.

To earn a certificate of completion, students must complete each course used to meet a certificate requirement with a “C” grade or better. Certificate requirements may be completed by a combination of day, evening or weekend courses listed in the Administration of Justice (AJ) Program. Successful completion of the certificate of completion requirements also counts towards the completion of the AJ certificate of achievement.

**Required courses**
- ADJUS 221 Criminal Evidence ... 3
- ADJUS 222 Criminal Investigation ... 3
- ADJUS 260 Patrol Procedures ... 3
- ADJUS 280 Probation and Parole ... 3
- ADJUS 284 Interviewing and Counseling ... 3

**Total units required** 13

Certificate of completion - Administration of justice - Crime scene investigator

This certificate prepares students for entry-level careers as crime scene investigators, criminal analyst, and fingerprint examiners, criminalists in limited areas of expertise, crime scene photographers, private security investigators, and criminal investigators. It also is a basic for those students who wish to pursue advanced careers as criminal profilers or advanced criminalists. Completion of this certificate will greatly improve the opportunity for employment.

To earn a certificate of completion, students must complete each course used to meet a certificate requirement with a “C” grade or better. Certificate requirements may be completed by a combination of day, evening or weekend courses listed in the Administration of Justice (AJ) Program. Successful completion of the certificate of completion requirements also counts towards the completion of the AJ certificate of achievement.

**Required courses**
- ADJUS 120 Introduction to the Administration of Justice ... 3
- ADJUS 203 Physical Evidence and the Crime Lab ... 3
- ADJUS 222 Criminal Investigation ... 3
- ADJUS 260 Patrol Procedures ... 3

**Total units required** 12

Certificate of completion - Administration of justice - Criminal law specialist

This certificate prepares a student for entry-level careers in many areas of the criminal justice system where a basic understanding of statutory and procedural criminal law is necessary. Examples of these positions would be law enforcement officers, lawyers, investigators, correctional personnel and private and corporate security. Anyone choosing a career in the criminal justice field should complete this certificate as a minimum.

To earn a certificate of completion, students must complete each course used to meet a certificate requirement with a “C” grade or better. Certificate requirements may be completed by a combination of day, evening or weekend courses listed in the Administration of Justice (AJ) Program. Successful completion of the certificate of completion requirements also counts towards the completion of the AJ certificate of achievement.

**Required courses**
- ADJUS 120 Introduction to the Administration of Justice ... 3
- ADJUS 121 Criminal Law ... 3
- ADJUS 122 Criminal Procedure ... 3
- ADJUS 221 Criminal Evidence ... 3

**Total units required** 12

Certificate of completion - Administration of justice - Juvenile counseling

This certificate prepares students for entry-level careers working with juvenile offenders, crime prevention, juvenile correctional facilities, and juvenile counseling and rehabilitation programs. Since juveniles commit most crimes, law enforcement officers should have a good understanding of the juvenile
justice system. Those persons wishing to work as probation officers or parole officers should strongly consider taking these courses to greatly improve their opportunity for employment.

To earn a certificate of completion, students must complete each course used to meet a certificate requirement with a “C” grade or better. Certificate requirements may be completed by a combination of day, evening or weekend courses listed in the Administration of Justice (AJ) Program. Successful completion of the certificate of completion requirements also counts towards the completion of the AJ certificate of achievement.

**Certificate of completion - Administration of Justice - Patrol specialist**

This certificate prepares students for entry-level careers as law enforcement officers in Federal, State, and local agencies as well as private and corporate security. After completing this certificate, students contemplating enrolling in the POST academies will have a solid foundation that will help ensure academic success. Students entering private security will have more training than is required by state law. Completion of this certificate will also give the student a greatly improved opportunity for employment.

To earn a certificate of completion, students must complete each course used to meet a certificate requirement with a “C” grade or better. Certificate requirements may be completed by a combination of day, evening or weekend courses listed in the Administration of Justice (AJ) Program. Successful completion of the certificate of completion requirements also counts towards the completion of the AJ certificate of achievement.

**ADJUS-121 Criminal Law**

3 units SC
54 hours lecture per term

*Recommended: eligibility for ENGL 122 or equivalent*

This course involves a detailed analysis of: a) the historical development and philosophy of American law; b) statutory law, including classifications, definitions and legality; c) case and constitutional law as it applies to situations and individuals in the justice system; and d) methodology and concepts of law and their role as a social force. The course emphasizes California criminal statutes. CAN AJ 2, CSU, UC

**ADJUS-122 Criminal Procedure**

3 units SC
54 hours lecture per term

*Recommended: eligibility for ENGL 122 or equivalent*

This course examines in detail the legal processes from pre-arrest, arrest through trial, sentencing and correctional procedures; a review of the history of case and common law; conceptual interpretations of law as reflected in course decisions; a study of case law methodology and case research as the decisions impact upon the procedures of the justice system. California law and procedures are emphasized. CSU

**ADJUS-124 Elements of Corrections**

3 units SC
54 hours lecture per term

*Recommended: eligibility for ENGL 122 or equivalent*

An introduction to major types of criminal behavior, patterns of career offenders, causal factors of crime and delinquency, and methods used in dealing with violators in the justice system. Emphasis will be placed on changing roles in corrections as practiced by law enforcement, courts, and correctional agencies. CSU

**ADJUS-125 Report Preparation for Criminal Justice**

3 units SC
54 hours lecture per term

*Recommended: eligibility for ENGL 122 or equivalent*

This course emphasizes the practical aspects of gathering, organizing, and preparing written reports for law enforcement and correctional activities on local, state, and federal levels. It will cover the techniques of communicating facts, information, and ideas effectively in a simple, clear, and logical manner for various types of criminal justice system reports, letters, memora-nda, directives and administrative reports. Students will gain practical experience in note-taking, report writing, and presenting testimony in court. CSU

**ADJUS-120 Introduction to the Administration of Justice**

3 units SC
54 hours lecture per term

*Recommended: eligibility for ENGL 122 or equivalent*

This course addresses the history and philosophy of justice as it evolved throughout the world. It addresses in detail: a) the American system of justice and the various subsystems, i.e. the police, the courts, corrections, etc.; b) the roles and inter-relationships of criminal justice agencies; c) concepts of crime causations, punishments, and rehabilitation; and d) issues pertaining to ethics, education, and training for participants in the criminal justice system. CAN AJ 2, CSU, UC
ADJUS-130 Police Multicultural Relations
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
A theoretical and conceptual overview of multicultural concepts and issues, including those related to gender, age, and sexual preference; an application of those concepts and issues to the three public safety disciplines (Law Enforcement, Judiciary, and Corrections); identification of problems related to our increasingly diverse population; and examination of strategies to overcome those problems, particularly in relation to the maintenance of social order. CSU, UC

ADJUS-139 Gangs and Threat Groups in America
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
An introduction to modern criminal gangs, their philosophy, history, structure, impact on the community and the criminal justice system. A study of the legal codes and prosecution of gang members. Evaluation of prison gang and their impact on the community. An examination of treatment programs in the institutions and the community. CSU

ADJUS-203 Physical Evidence and the Crime Laboratory
4 units LR
54 hours lecture / 54 hours laboratory per term
Recommended: eligibility for ENGL 122 or equivalent
This course is an in-depth analysis and discussion of the nature and significance of various types of physical evidence commonly found at crime scenes. Areas of emphasis include: (1) the use of physical evidence in the forensic setting, (2) types of physical evidence, (3) the identification, collection and packaging of physical evidence, (4) principles of crime scene photography, (5) crime scene sketching, (6) evidence collection techniques: casting shoe and tool marks, lifting latent fingerprints and (7) the preservation of trace evidence, i.e. physiological fluids, hair, soil, fibers, glasses, etc. This is a "hands on" class combining the theoretical concepts associated with use of physical evidence in the forensic setting with student involvement in the processing of simulated crime scenes. The laboratory component, will focus on the student applying the principles learned in lectures and will be mandatory. CSU

ADJUS-221 Criminal Evidence
3 units LR
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
Origin, development, philosophy and constitutional basis of evidence; procedural considerations affecting arrest, search and seizure, kinds and degrees of evidence and rules governing admissibility; judicial decisions interpreting individual rights and case studies. CSU

ADJUS-222 Criminal Investigation
3 units LR
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
Fundamentals of investigation; crime scene search and recording; collection and preservation of physical evidence, scientific aids; modus operandi sources of information; interviews and interrogation; follow-up and case preparation. CAN AJ8, CSU

ADJUS-230 Juvenile Procedures
3 units LR
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
Organization, functions, and jurisdiction of juvenile agencies, the processing and detention of juveniles/juvenile case disposition; juvenile statutes and court procedures. CSU

ADJUS-260 Patrol Procedures
3 units LR
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
Responsibilities, techniques, purpose and methods of police patrol; decision making and judgment of their community effect. CSU

ADJUS-270 Personal Self Defense and Firearms
2 units SC
May be repeated once
18 hour lecture / 54 hours laboratory per term
Recommended: eligibility for ENGL 122 or equivalent
Note: requires ability to participate in vigorous physical activity. Persons with any felony convictions may not take this course
This course was designed for anyone seeking training in the area of personal self-defense and firearms training. Although originally developed for law enforcement personnel re-certification, the course will benefit anyone desiring proficiency with handguns, personal safety and defensive tactics. Experienced law enforcement instructors with many years of teaching and training experience will instruct the course. In addition to moral and legal aspects, as well as safety in the use of side arms and the shotgun, the course will include training in the use of pepper spray and mace. Training in the use of electronic stun guns will also be available as part of this course. CSU

ADJUS-280 Probation and Parole
3 units LR
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
An introduction to probation and parole, its philosophy, history, legal mandates, relations to courts, basic procedures and common treatment approaches. A study of legal codes affecting probation and parole; evaluation of the prison system and inmate community; parole supervision and examination of the success of a contemporary prison and parole system. CSU
ADJUS-284 Interviewing and Counseling
3 units LR
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
An introduction to the concepts and techniques of communication, casework and counseling as utilized by practitioners in the administration of justice field. Students will review the interview and interrogation process as applicable to the social work function in policing and corrections. A basic course for students planning to enter or for those already employed within the administration of justice field. CSU

ADJUS-298 Independent Study
.5-3 units SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered
An opportunity for students to pursue special interests under direction of faculty. CSU

AET-120 Introduction to Alternate Energy Systems
2 units SC
36 hours lecture / 18 hours laboratory per term
This course will cover present day energy systems, and then cover an in-depth analysis of the design and installation of alternate energy systems. Alternate energy systems to be covered in detail are solar water heating systems, solar electrical systems, wind electrical systems, wind mechanical systems, small hydroelectrical systems and unique conservation methods. Also presented are topics on geothermal energy, fuel cells, and biomass systems. Additional topics include applications of alternate energy in transportation, industrial, commercial and residential systems. CSU

AET-130 Photovoltaic Systems Design and Installation
2 units SC
May be repeated once
36 hours lecture / 18 hours laboratory per term
This course will show students how to do solar site evaluations, electrical load calculations, solar systems size calculations, and installation techniques. This course will help students design and install their own solar system and/or obtain skills for employment. CSU

AET-150 Topics in Alternate Energy Technologies
.3-4 units SC
May be repeated three times
Variable hours
A supplemental course in Alternate Energy Technology that provides a study of current concepts and practices in Alternate Energy Technology and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

ANTHR-115 Primate Evolution and Adaptation
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
An introduction to the biology, behavior, ecology, and evolutionary history of the primate order. Emphasis will be given to the following topics: 1) evolutionary theory; 2) mammalian biology, anatomy, and osteology; 3) primate behavior, ecology, and biogeography; 4) primate evolutionary history; 5) fossil man. CSU, UC

ANTHR-120 Magic, Witchcraft, and Religion in the Americas
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
A cross-cultural, multicultural examination of the forms and functions of supernatural belief systems and associated rituals that have developed in various societies in the Americas. Basic
ethnographic and archaeological concepts and methodologies will be introduced and applied to the assessment and analysis of selected New World cultural/religious traditions. Emphasis will be placed on understanding religious belief systems within their given social contexts. The course will also provide a comparative assessment of the major prehistoric and historic social and religious patterns that developed in the Americas, and will include a cross-cultural comparison of the social and religious traditions that developed within various Native American, African-American, Latino/Hispanic American, and Euro-American communities in order to illustrate major systems types and to provide insight into the general functions of religious belief and ritual in human life. CSU, UC

ANTHR-125 Introduction to Archaeology and Prehistory
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
An introduction to archaeological methods and the study of prehistory. Course will deal with field work techniques, the classification and interpretation of artifacts, theory in archaeology and prehistory, and will introduce students to the key developments in the study of human prehistory. Emphasis will be given to the study of the prehistoric inhabitants of the San Francisco Bay Region. CAN ANTH 6, CSU, UC

ANTHR-126 Introduction to Archaeological Field Methods
3 units SC
18 hours lecture / 108 hours laboratory per term
Recommended: ANTHR 125 or equivalent; eligibility for ENGL 122 or equivalent
This course provides training in surface survey, mapping, scientific excavation, classification and analysis of excavated material, writing interpretive reports, and preparation of museum exhibits. Aspects emphasized will depend on available archaeological opportunities in the Bay Area. A significant portion of class time will be in the field. CSU

ANTHR-130 Cultural Anthropology
3 units LR
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
A survey of culture as a basic aspect of the human adaptation. Topics include the concept of culture, human cultural development, processes of enculturation, language, and the patterns and principles of ethnographic research. CAN ANTH 4, CSU, UC

ANTHR-135 Native Americans
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
A survey of the Native American cultures that developed in North America. The course also explores the effects of European contact, conquest, colonization, United States expansion, acculturation, U.S. Government policies, wars and treaties, and reservation life of Native Americans, as well as the past and present roles of Native Americans in U.S. society. CSU, UC

ANTHR-140 Physical Anthropology
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
The physical nature of man including evolution, fossil man, race, and differences. The relationships between human biology and cultural development will receive special emphasis. CAN ANTH 2, CSU, UC

ANTHR-141L Physical Anthropology Lab
1 unit SC
54 hours laboratory per term
Prerequisite: ANTHR 115 or equivalent or ANTHR 140 or equivalent (may be taken concurrently)
Recommended: eligibility for ENGL 122 or equivalent
An introductory laboratory course in which scientific methodology is taught and used to explore/experiment with topics found in introductory physical anthropology and primate evolution courses. Topics will include: paleontology, hands-on study of fossils, Mendelian and population genetics, human variability, forensics, medical anthropology, epidemiology, non-human primates, primate dental and skeletal anatomy, paleoprimatology, paleoanthropology, hominid dietary patterns, the study of hominids as bio-culturally adapted animals, and a survey of general methodologies utilized in physical anthropological research. Field trips may be included. CSU, UC

ANTHR-150 Foundations of Mesoamerican Civilizations
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or the equivalent
An introduction to the study of the various civilizations which developed in Mesoamerica prior to European contact. Emphasis will be on the development of the Maya and Aztec civilizations through an examination of Mesoamerican cultures from the earliest hunting levels through the Formative, Classic, Post-Classic, Spanish Conquest, and early Colonial Periods. CSU, UC

ANTHR-155 Topics in Anthropology
.5-3 units SC
May be repeated three times
Variable hours
An in-depth study of selected topics, issues, and problems related to anthropological aspects of human behavior. The topic to be offered in a particular term is indicated in the current course schedule. CSU

ANTHR-298 Independent Study
.5-3 units SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered
An opportunity for advanced students to pursue special interests under the direction of the faculty. CSU, UC (credit limits may apply to UC - see counselor)
Arabic – ARABC

Applied and Fine Arts Division
Dean of Applied and Fine Arts
Humanities Building 112 and 113
925-685-1230 x 2312

ARABC-120 First Term Arabic
5 units SC
90 hours lecture / 18 hours laboratory per term
This is a beginning level language course in Modern Standard Arabic. The course will be proficiency based, covering all four language skills (speaking, listening, reading, and writing). Considerable emphasis will be placed on active use of the language both in class and in daily homework assignments. The class introduces students to the basic phonology and script of the Arabic alphabet, as well as aspects of the sociolinguistics of Arab culture. Students will practice writing the letters in sequence while developing comprehension skills. CSU

ARABC-121 Second Term Arabic
5 units SC
90 hours lecture / 18 hours laboratory per term
Recommended: ARABC 120 or equivalent
This is the second level language course in Modern Standard Arabic. This course is designed to build upon skills in reading and writing developed in ARABC 120. Students will gain increased vocabulary and a greater understanding of more complex grammatical structures. They will be able to approach prose, fiction, and non-fiction written in the language. Students will also increase their proficiency in Arabic script and sound system, widen their working vocabulary, learn key grammatical points, and practice conversation and dictation. Students deliver oral presentations and write academic papers in Arabic. A variety of Arabic texts covering many subjects of interest such as, literature, classical writing, poetry, media reports, and news will be introduced. CSU

ARABC-150 Topics in Arabic
3-4 units SC
May be repeated three times
Variable hours
A supplemental course in Arabic to provide a study of current concepts and problems in Arabic and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

Possible career opportunities
Students are provided with a strong background in spatial composition, design theory, and production methods that prepare them for employment as an architectural technician. Many general courses in the architecture program offer education in areas that are also applicable to an entry-level internship position performing manual or computer-aided drafting, furniture or cabinet design, or architectural rendering and illustration.

Certificate of achievement - Architecture technology
This program prepares students for employment as architectural technicians who work with and are supervised by an architect. They may prepare technical and presentation drawings, draft copies of specifications and cost estimates, revise plans, trace details from various sources, operate printing machines, and assemble prints and other documents for projects. Landscape architects, industrial designers, interior designers, and engineers also employ architectural technicians.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better. Required courses are available in the day, and some are also offered in the evening.

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
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<tbody>
<tr>
<td>ARCHI 120 Introduction to Architecture and Environmental Design........................................3</td>
<td></td>
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<tr>
<td>ARCHI 121 Architectural Design I.................................................................3</td>
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<tr>
<td>ARCHI 130 Architectural Graphics I.................................................................3</td>
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<td>ARCHI 131 Architectural Graphics II.................................................................3</td>
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<td>ARCHI 220 Architectural Design II.................................................................3</td>
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<td>ARCHI 221 Architectural Design III.................................................................3</td>
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<td>ARCHI 222 Architectural Working Drawings I....................................................3</td>
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<td>ARCHI 223 Architectural Working Drawings II..................................................3</td>
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<tr>
<td>CONST 135 Construction Processes........................................................................4</td>
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<tr>
<td>CONST 144 Materials of Construction......................................................................3</td>
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<td>CONST 273 Construction Management.................................................................3</td>
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<tr>
<td>ENGIN 239 Statics and Strength of Materials.......................................................4</td>
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<tr>
<td>PHYS 110 Elementary Physics................................................................................3</td>
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plus at least 3 units from:
| ARCHI 155 History of Architecture: Europe and World ......3 |
| ARCHI 160 History of American Architecture ..................3 |

plus at least 4 units from:
| ENGIN 111 Mathematics for Technicians............................4 |
| MATH 120 Intermediate Algebra........................................4 |

plus at least 2-3 units from:
| CONST 116 Surveying Related to Construction ................2 |
| ENGIN 140 Plane Surveying............................................3 |

Total units required 50-51

Architecture – ARCHI

Physical Science and Engineering Division
Dennis Smith, Dean
Physical Science Building 261
925-685-1230 x 2359
ARCHI-120 Introduction to Architecture and Environmental Design
3 units LR
36 hours lecture / 72 hours laboratory per term
Introduction to the professional field of architecture, architectural design and planning. Investigation and evaluation of the architectural environment with identification and utilization of a creative design process. Study of the use of line, shape, form, texture, light, color, scale, and structure in relation to the creation of architectural space. CSU, UC (credit limits may apply to UC - see counselor)

ARCHI-121 Architecture Design I
3 units SC
36 hours lecture / 72 hours laboratory per term
Recommended: ARCHI 120 or equivalent and ARCHI 130 or equivalent
Beginning study of architectural design focusing on fundamental design skills and theory. Exploration of concepts related to site planning and site analysis, spatial qualities of architecture, movement through architectonic space, material qualities, and precedent studies. CSU, UC (credit limits may apply to UC - see counselor)

ARCHI-126 Computer Aided Design and Drafting, AutoCAD
4 units LR
May be repeated if software is upgraded or changed
54 hours lecture / 54 hours laboratory / 36 hours laboratory by arrangement per term
Course is designed for students with no previous drafting experience. Basic computer experience is helpful. Course will cover 2 and 2-1/2 dimensional computer aided drafting. Emphasis will be on the software package AutoCAD. Hands on training with applications in architecture is stressed. CSU, UC

ARCHI-130 Architectural Graphics I
3 units LR
36 hours lecture / 72 hours laboratory per term
An introduction to graphics for architects. A study of the use of drawing as a tool in architecture. Problem solving in orthographic and pictorial projection and drawing. Topics includes: lettering, perspective, barline drawing, color technique, and shades and shadows. Emphasis on mechanical drafting with pencil and introduction to other media. CSU, UC (credit limits may apply to UC - see counselor)

ARCHI-131 Architectural Graphics II
3 units SC
36 hours lecture / 72 hours laboratory per term
Prerequisite: ARCHI 130 or equivalent
Advanced exploration of drawing techniques utilizing freehand and mechanical drawing methods of representation. Emphasis on perspective drawing, shade and tone, and the mental ordering processes involved in accurately representing the built environment. CSU, UC (credit limits may apply to UC - see counselor)

ARCHI-132 Architectural Graphics III
4 units SC
36 hours lecture / 108 hours laboratory per term
Prerequisite: ARCHI 131 or equivalent
Continuation of ARCHI 131 with emphasis on advanced rendering in color. Class covers the professional techniques utilized to create drawings using a variety of graphic media and processes. Further study of significant buildings in the history of architecture in relation to the methods used for architectural rendering and presentation. CSU

ARCHI-135 Computer Applications in Architecture
3 units SC
36 hours lecture / 72 hours laboratory / 36 hours laboratory by arrangement per term
Recommended: ARCHI 130 or equivalent
An introduction to the use of computers in architecture with an emphasis on drawing. An integrated architectural CAD program will be used to generate presentation drawings and working drawings. Two and three dimensional geometric constructions and projections. CSU

ARCHI-150 Topics in Architecture
3-4 units SC
May be repeated three times
Variable hours
A supplemental course in architecture designed to provide a study of the current developments in the field and related subdivisions. Specific topics to be announced. CSU

ARCHI-155 History of Architecture: Europe and the World
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
A comprehensive architectural history course emphasizing the development of architectural movements from 5000 B.C. to the present. Course discusses architectural building types in relation to their geographic and cultural content. CSU, UC (credit limits may apply to UC - see counselor)

ARCHI-160 History of American Architecture
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
A survey of American architectural history from Native American dwellings to the present, utilizing lectures, slides, prints and field trips. Course covers the architectural influence of immigrant groups from multiple cultural and ethnic backgrounds as well as the influences of architectural design movements through the course of history. Topics in architecture and urbanism are presented in relation to their social, political and economic contexts. CSU, UC (credit limits may apply to UC - see counselor)
ARCHI-220  Architectural Design II
3 units LR
36 hours lecture / 108 hours laboratory per term
Recommended: ARCHI 120, 130, or equivalent
First level studio design class beginning the study of architectural design. Course focuses on development of fundamental design skills and spatial theory. Exploration of concepts related to site planning and site analysis, spatial qualities of architecture, movement through architectonic space, material qualities, and precedent studies through drawing and model making. CSU, UC (credit limits may apply to UC - see counselor)

ARCHI-221  Architectural Design III
3 units LR
36 hours lecture / 108 hours laboratory hours per term
Recommended: ARCHI 220 or equivalent
Second level studio design class continuing the study of architectural design. Course focuses on development of applying fundamental design skills and spatial theories to design projects of greater architectural complexity. Projects will incorporate the use of concepts of site planning, structural systems and circulation through space into a variety of design problems. CSU, UC (credit limits may apply to UC - see counselor)

ARCHI-222  Architectural Working Drawings I
3 units SC
36 hours lecture / 72 hours laboratory per term
Recommended: ARCHI 130 or equivalent
Preparation and interpretation of architectural working drawings and specifications, with emphasis on light wood frame construction. Use of reference material such as local planning ordinances, Uniform Building Code, Architectural Graphic Standards, and information published by building product manufacturers. CSU

ARCHI-223  Architectural Working Drawings II
3 units SC
36 hours lecture / 72 hours laboratory per term
Recommended: ARCHI 222 or equivalent
Preparation and interpretation of architectural working drawings and specifications, with emphasis on heavy timber, concrete, masonry, and steel construction. Use of reference material such as local planning ordinances, Building Codes, Architectural Graphic Standards, and information published by building product manufacturers. CSU

ARCHI-298  Independent Study
.5-3 units SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered
Selected students may pursue independent study and development of projects under guidance of faculty. CSU

Art – ART

Applied and Fine Arts Division
Dean of Applied and Fine Arts
Humanities Building 112 and 113
925-685-1230 x 2312

Possible career opportunities
Career options include professions engaged in creating works of art as an artist, painter, sculptor, ceramist, engraver, printmaker, metal smith, illustrator, designer, muralist, and jeweler. Some careers requiring an education beyond the associate degree include: art critic, art dealer, educator, historian, arts administrator, advertising specialist, computer graphics illustrator, display designer, gallery director, and visual information specialist.

ART-105  Introduction to Drawing, Color, and Two Dimensional Design
3 units SC
May be repeated once
36 hours lecture / 72 hours laboratory per term
Recommended: eligibility for ENGL 116 / 118
Note: ART 105A and 105B combined are equal to ART 105
Presentation of drawing concepts and techniques, perspective, as well as color theory fundamentals, with emphasis on design principles and composition. CAN ART 8+14, CSU, UC

ART-105A  Introduction to Drawing
1.5 units SC
May be repeated once
18 hours lecture / 36 hours laboratory per term
Note: ART 105A is equivalent to the first half of ART 105. ART 105A and 105B may be taken in reverse order
Formerly Art 100
Presentation of fundamentals of drawing and composition and the basic application thereof. CSU, UC

ART-105B  Introduction to Color
1.5 units SC
May be repeated once
18 hours lecture / 36 hours laboratory per term
Note: ART 105B is equivalent to the second half of ART 105. ART 105A and 105B may be taken in reverse order
Formerly Art 101
Presentation of the fundamentals of color theory, color function, and color application. CSU, UC

ART-106  Drawing and Composition
3 units SC
May be repeated once
36 hours lecture / 72 hours laboratory per term
Recommended: ART 105 or equivalent; eligibility for ENGL 116/118
An exploration of drawing concepts, descriptive drawing, and logical form rendering with an emphasis on stylistic develop-
ment. May explore additional color media such as pastel and prismacolor pencils. CSU, UC

ART-106A Drawing and Composition: Expressive
1.5 units SC
May be repeated once
18 hours lecture / 36 hours laboratory per term
Recommended: ART 105 or equivalent; eligibility for ENGL 116/118
Note: ART 106A is the first half of ART 106
Techniques of drawing including descriptive drawing and creative composition through the employment of traditional drawing media with an emphasis on pastel and charcoal. CSU, UC

ART-106B Drawing and Composition: Controlled
1.5 units SC
May be repeated once
18 hours lecture / 36 hours laboratory per term
Recommended: ART 105A or equivalent; eligibility for ENGL 116/118
Note: ART 106B is the second half of ART 106
Techniques of drawing, descriptive drawing, and creative composition through the employment of traditional drawing media. May explore additional color media, such as pastel and prismacolor pencils. CSU, UC

ART-107 Figure Drawing I
3 units SC
May be repeated once
36 hours lecture / 72 hours laboratory per term
Recommended: ART 105 or ART 106 or equivalents; eligibility for ENGL 116/118
Drawing from the human figure with emphasis on the traditional drawing media of pencil, charcoal, and ink. CAN ART 24, CSU, UC

ART-108 Figure Drawing II
3 units SC
May be repeated once
36 hours lecture / 72 hours laboratory per term
Recommended: ART 105 or equivalent, ART 106 or equivalent; eligibility for ENGL 116/118
Drawing from the human figure. Emphasis on mixed media: pastels, gouache, and watercolor. CSU, UC

ART-109 Printmaking: Monotype
3 units SC
May be repeated once
36 hours lecture / 72 hours laboratory per term
Recommended: ART 105 or equivalent, or ART 106 or equivalent
An exploration of monotype (single image) processes utilizing a painterly approach to printmaking. Emphasis on traditional and contemporary methods. CSU, UC

ART-110 Introduction to Printmaking
3 units SC
May be repeated once
36 hours lecture / 72 hours laboratory per term
Recommended: ART 105 or equivalent, or ART 106 or equivalent
An introduction to various printmaking techniques: Monotype, Collagraph, Dry Point, Linoleum Cut. CAN ART 20, CSU, UC

ART-111 Printmaking: Etching
3 units SC
May be repeated once
36 hours lecture / 72 hours laboratory per term
Recommended: ART 105 or equivalent courses
This is a course in intaglio printmaking: line etching, aquatint, deep-bite, multiple color plates, and chine colle. Projects and discussions develop students’ understanding of how images can communicate our experience and imagination. Non-toxic methods are used. CSU, UC

ART-112 Digital Imaging for the Artist
3 units SC
May be repeated once
36 hours lecture / 72 hours laboratory per term
Recommended: ART 105 or equivalent courses
Note: see schedule of courses for software to be used
This is a course in digital imaging for the artist. This course is designed to develop a fine arts approach to computer-generated imaging. Students will utilize leading graphic arts software programs. An emphasis will be placed on the application and integration of color theory as well as design principles with digital imaging. CSU, UC

ART-120 Watercolor I
3 units SC
May be repeated once
36 hours lecture / 72 hours laboratory per term
Recommended: ART 105 or equivalent;
Note: ART 120A and 120B combined are equivalent to ART 120
A study of the materials and techniques of watercolor painting with emphasis on learning techniques, problem solving, concept development, and skills demonstration. CSU, UC

ART-120A Introduction to Watercolor
1.5 units SC
May be repeated once
18 hours lecture / 36 hours laboratory per term
Recommended: eligibility for ENGL 116/118
Note: ART 120A is equivalent to the first half of Art 120.
ART 120A and 120B may be taken in reverse order
Formerly ART 102
Emphasis on the study of beginning techniques and materials of watercolor painting. CSU, UC
ART-120B  Watercolor Workshop  
1.5 units  SC  
May be repeated once  
18 hours lecture / 36 hours laboratory per term  
Recommended: ART 120A or equivalent; eligibility for ENGL 116/118  
Note: ART 120B is equivalent to the second half of ART 120. ART 120A and 120B combined are equal to ART 120. Formerly ART 103  
Emphasis on problem solving concept, development, and skill demonstration in watercolor. CSU, UC

ART-121  Watercolor II  
3 units  SC  
May be repeated once  
36 hours lecture / 72 hours laboratory per term  
Recommended: ART 120 or equivalent; eligibility for ENGL 116/118  
A continuation of watercolor skill development, with an emphasis on compositional components and painting concepts. CSU, UC

ART-125  Color Theory and its Application to 2-D Media  
3 units  SC  
May be repeated once  
36 hours lecture / 72 hours laboratory per term  
Recommended: ART 105 or equivalent and ART 126 or equivalent; eligibility for ENGL 116/118  
The study, practice, and analysis of color theory as it affects formal and conceptual elements in 2-D media. May be offered in oil or water-based paint, as well as electronic media. CSU, UC

ART-126  Oil / Acrylic Painting I  
3 units  SC  
May be repeated once  
36 hours lecture / 72 hours laboratory per term  
Recommended: ART 105 or equivalent; eligibility for ENGL 116/118  
Note: ART 126A and ART 126B combined are equivalent to ART 126  
A study of the materials and techniques of oil and acrylic painting for the beginning student. CAN ART 10, CSU, UC

ART-126A  Introduction to Oil/Acrylic Painting A  
1.5 units  SC  
May be repeated once  
18 hours lecture / 36 hours laboratory per term  
Recommended: ART 105 or equivalent; eligibility for ENGL 116/118  
Note: ART 126A is equivalent to the first half of ART 126  
Course designed for the student who has had no experience with oil/acrylic painting. The emphasis of the class is on basic painting techniques. Specific assignments are designed to enable students to achieve basic goals. CSU, UC

ART-126B  Introduction to Oil / Acrylic Painting B  
1.5 units  SC  
May be repeated once  
18 hours lecture / 36 hours laboratory per term  
Recommended: ART 105 or equivalent; ART 126A; eligibility for ENGL 116/118  
Note: ART 126B is equivalent to the second half of ART 126  
This course deals with painting as a means of communication and is a practical study of established styles and techniques of traditional painting with emphasis on direct and indirect painting methods. CSU, UC

ART-127  Oil / Acrylic Painting II  
3 units  SC  
36 hours lecture / 72 hours laboratory per term  
Recommended: ART 105 or equivalent, ART 125, and 126 or equivalent; eligibility for ENGL 116/118  
This course is an intermediate level painting class. This course provides students with painting projects designed to further enhance techniques, technical skills, and problem solving abilities. CSU, UC

ART-128  Symbols and Visions  
3 units  SC  
May be repeated once  
36 hours lecture / 72 hours laboratory per term  
Recommended: ART 105 or equivalent, ART 125, ART 126 or equivalent, and ART 127; eligibility for ENGL 116/118  
A course designed to develop the artist’s imagination. Presentations of ideas and themes of historic and contemporary painting concerns will be made, with emphasis on the conceptualization of imagery. CSU, UC

ART-129  Advanced Painting  
3 units  SC  
36 hours lecture / 72 hours laboratory per term  
Recommended: ART 105 or equivalent, ART 125, ART 126 or equivalent, ART 127, and ART 128; eligibility for ENGL 116/118  
This course is an advanced level painting class. Approaches to painting issues concerning subject matter, composition, and expression will be studied. This course is designed to develop the artist's portfolio with a cohesive and thematic series of paintings. CSU, UC

ART-135  Art Gallery/Museum Management  
3 units  SC  
36 hours lecture / 72 hours laboratory per term  
Recommended: eligibility for ENGL 116/118  
A study of the skills, theories, and practices necessary to prepare works of art for public display and their practical application in the DVC Art Gallery. Matting and framing, exhibition design, conservation, advertising, legal issues, formal skills needed to interact within art and business environments, preparation and organization of art works for final presentation will be among the topics emphasized. Off-campus, professional internships may be possible upon completing this class. CSU
ART-140  Introduction to Sculpture and 3-D Design
3 units SC
May be repeated once
36 hours lecture / 72 hours laboratory per term
Recommended: ART 140 or equivalent; eligibility for ENGL 116/118
A hands-on introduction to understanding the basic elements of three-dimensional form, volume, and spatial relationships through varied mediums and methods of sculptural formulation. CAN ART 12, CSU, UC

ART-141  Sculpture I
3 units SC
May be repeated once
36 hours lecture / 72 hours laboratory per term
Recommended: ART 140 or equivalent; eligibility for ENGL 116/118
A continuation of ART 140, which allows for further exploration of processes and principles of volume design, with representational and non-objective subject matter. This class allows for more study, giving students a less structured approach to problems in sculpture. Students are expected to maintain a conceptual dialogue with the instructor. CSU, UC

ART-142  Metal Art I
3 units SC
May be repeated once
36 hours lecture / 72 hours laboratory per term
Recommended: ART 140 or equivalent; eligibility for ENGL 116/118
Comprehensive introduction to various metal sculpture processes. This course involves mold-making techniques for casting bronze, aluminum, and iron objects, as well as basic welding and blacksmithing of steel sculpture. Emphasis will be on 3-D design quality, craftsmanship, and subject matter. CSU

ART-143  Metal Art II
3 units SC
May be repeated once
36 hours lecture / 72 hours laboratory per term
Recommended: ART 140 or equivalent; eligibility for ENGL 116/118
A continuation of various aspects of metal arts. Advanced techniques in metal casting of bronze, aluminum, and iron are explored, as well as the fabrication of steel sculpture using the forge, welding, and grinding. Emphasis will be on advanced craftsmanship, technique, and 3-D design, with research in the history of traditional and contemporary metal sculpture. CSU

ART-144  Metal Casting Techniques I
3 units SC
May be repeated once
36 hours lecture / 72 hours laboratory per term
Recommended: ART 140, ART 142 and ART 143; eligibility for ENGL 116/118
Various aspects of metal sculpture using casting techniques. Investment molds and resin-bonded sand molds will be introduced for castings in bronze, aluminum, and iron. An in-depth investigation of traditional and contemporary metal sculpture processes with an emphasis on 3-D design quality. CSU

ART-145  Metal Casting Techniques II
3 units SC
May be repeated once
36 hours lecture / 72 hours laboratory per term
Recommended: ART 140 or equivalent and ART 144 or equivalent; eligibility for ENGL 116/118
This course is a continuation of ART 144 with emphasis on more complex casting problems. The casting process for aluminum, bronze, and iron will be thoroughly explored. Advanced mold-making techniques in resin-bonded sand molds, green sand, and burn-out investment molds are also covered. Research in traditional and contemporary cast metal art emphasized, as well as individual 3-D design quality. CSU

ART-146  Metalsmithing and Jewelry
3 units SC
May be repeated once
36 hours lecture / 72 hours laboratory per term
Recommended: eligibility for ENGL 116/118 or equivalent
This is a beginning course exploring basic jewelry and metalsmithing design and hands-on processes. The studio course work includes the techniques of soldering, cutting, stone setting, bezel work, rolling, chain making, metal forming, and metal finishing. The course further provides a foundation in traditional and contemporary jewelry design and aesthetic forms. CSU

ART-150  Topics in Studio Art
0-3 units SC
May be repeated three times
Variable hours
Recommended: eligibility for ENGL 116/118
This is a supplemental course in Studio Art Topics to provide a study of current concepts and problems in art and related subdivisions. Specific topics will be announced in the schedule of courses. CSU, UC (credit limits may apply to UC - see counselor)

ART-152  Wheel-Thrown Ceramics I
3 units SC
May be repeated once
36 hours lecture / 72 hours laboratory per term
Recommended: eligibility for ENGL 116/118
An exploration of the characteristics of clay through the use of the potter’s wheel with emphasis on traditional techniques and contemporary ideas relative to form, content, and surface treatment. CAN ART 6, CSU, UC

ART-153  Wheel-Thrown Ceramics II
3 units SC
May be repeated once
36 hours lecture / 72 hours laboratory per term
Recommended: ART 152; eligibility for ENGL 116/118
Advanced problems in wheel-thrown forms, with emphasis on concept development, form analysis, and surface treatment. CSU, UC
ART-154  Hand-Built Ceramics
3 units  SC
May be repeated twice
36 hours lecture / 72 hours laboratory per term
Recommended: eligibility for ENGL 116/118
Using functional objects as a starting point, students will learn
traditional and contemporary hand-building techniques. Then,
students will explore the sculptural potential of these methods.
CSU, UC

ART-155  Ceramic Sculpture
3 units  SC
May be repeated twice
36 hours lecture / 72 hours laboratory per term
Recommended: eligibility for ENGL 116/118
An exploration of sculptural form through the use of the ceram-
ic medium which will include a variety of construction and firing
techniques. Students will be introduced to a broad range of
aesthetic styles and philosophies. CSU, UC

ART-156  Figurative Ceramics
3 units  SC
May be repeated twice
36 hours lecture / 72 hours laboratory per term
Recommended: eligibility for ENGL 116/118
A sculptural exploration of the human figure through the use of
the ceramic medium involving a variety of construction and fir-
ing techniques. Students will be introduced to a broad range of
aesthetic styles and philosophies relevant to the human form.
CSU, UC

ART-160  Basic Photography
3 units  SC
36 hours lecture / 72 hours laboratory per term
Recommended: eligibility for ENGL 116/118
Note: students supply cameras
An introduction to photographic and light-sensitive materials.
Concepts and techniques, photograms, past-life negatives,
magazine print-throughs, and elementary projection printing.
Methods of image preservation and presentations. History of
photography imagery. CAN ART 18, CSU, UC

ART-161  Intermediate Photography
3 units  SC
May be repeated once
36 hours lecture / 72 hours laboratory per term
Recommended: ART 160
Note: students supply cameras
An investigative approach to photography and photo imagery
as “fine art” with emphasis on technical acuity, creative com-
position, and the conceptualized image. CSU, UC

ART-162  Advanced Photography
3 units  SC
36 hours lecture / 72 hours laboratory per term
Recommended: ART 161
Note: students supply cameras
A continuance of intermediate photography with additional
involvement in the concepts of photographic vision through the
exercise of aesthetic and philosophical attitudes, investigation
of individual photographic concepts and development of a per-
sonal aesthetic. CSU

ART-163  Documentary Photography
3 units  SC
May be repeated three times
36 hours lecture / 72 hours laboratory per term
Recommended: ART 160 or equivalent. Appropriate for stu-
dents in journalism.
Note: students supply cameras
Intermediate-level course in which the student will partake in
field trips as an adjunct to in-class lectures and studio time. The
main emphasis will be on documentary photography, its defini-
tion, historical precedents, and actual execution. CSU

ART-250  Projects in Art
1-3 units  SC
May be repeated three times
Variable hours
This is a supplemental course in studio art topics, providing a
study of current concepts and problems in art and related sub-
divisions. Specific topics will be announced in the schedule of
courses. CSU, UC (credit limits may apply to UC - see counselor)

ART-265  Photography Workshop
3 units  SC
May be repeated three times
18 hours lecture / 90 hours laboratory per term
Recommended: ART 160
Course designed to refine the aesthetic vision and visual lit-
eracy of the experienced photographer by offering a structured
environment to cultivate an individual’s point of view. Students
will define and develop an individual project based on their aes-
thetic concerns. CSU

ART-298  Independent Study
.5-3 units  SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract
to department and instruction office. Topics must extend study
beyond courses offered.
An opportunity for advanced students or students with special
interests to pursue specific topics under direction of the Art fac-
culty. CSU, UC (credit limits may apply to UC - see counselor)

Art history – ARTHS
Applied and Fine Arts Division
Dean of Applied and Fine Arts
Humanities Building 112 and 113
925-685-1230 x 2312
Possible career opportunities
Students can pursue careers as curators or archivists at the many museums and galleries across the country. Careers in media, advertising, publishing, fashion or design, as well as art therapy, and working with handicapped or disabled people are also open to art history students. Undergraduate art history majors can pursue advanced training in art history, archaeology, architecture, law, library and information science, business, and education.

ARTHS-190 Topics in Art History
1-3 units SC
May be repeated three times
Variable hours
Recommended: eligibility for ENGL 116/118
Analysis and appreciation of art through the problem-solving approach. Means of understanding the visual arts and their interrelationships with each other and with their social environment are emphasized. The content of this course changes each semester, depending on specific topic. CSU

ARTHS-193 History of Asian Art
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 116/118
An introduction of major art forms and traditions in Asia from prehistoric time to the present. Topics of the artists and patrons will be addressed. Comparison will be made between the course material with other world art traditions. CSU, UC

ARTHS-195 History of Prehistoric and Ancient Art
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 116/118
A history of Western art from the Paleolithic cave paintings through the end of the Roman period and the beginning of early Christian art. Archeological and anthropological problems are discussed in relation to the study of art styles. Discussion of the social and cultural background of ancient civilizations and role of the artist. CAN ART 2, ARTHS 195+196+197 = CAN ART SEQ A, CSU, UC

ARTHS-199 Contemporary Art History
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
A survey of contemporary art in the United States from 1945 to the present. Emphasis is placed on identifying and understanding important contemporary art movements and images, as well as social and political issues that helped shape the character of art produced during this time. CSU, UC

Astronomy – ASTRO

Physical Sciences Division
Dennis Smith, Dean
Physical Science Building 261
925-685-1230 x 2359

Possible career opportunities
Considered a branch of physics, astronomy is really a marriage of the physical sciences from planetary science and atmospheric science, to physics and chemistry. Study in astronomy prepares students for careers in scientific research, systems analysis and engineering, as well as software engineering and development. More than two years of college study is usually required.

ASTRO-110 The Visible Universe
3 units LR
54 hours lecture per term
Recommended: MATH 110 or equivalent; eligibility for ENGL 122 or equivalent
Fundamental concepts in astronomy and observational techniques including selected mathematical concepts used in developing an understanding of celestial motions and coordinate systems and their importance to humanity. The planetarium sky is a major learning tool. CSU, UC (credit limits may apply to UC - see counselor)
ASTRO-120 Elementary Astronomy
3 units LR
54 hours lecture per term
Recommended: MATH 110 and 114 or equivalent; eligibility for ENGL 122
Elementary mathematical approach to the solving of problems relating to solar and stellar systems. Topics include instrumentation used for and the analysis of electromagnetic radiation. Properties and evolution of stars and galaxies as well as their role in the evolution of the universe will be the major emphasis. CSU, UC (credit limits may apply to UC - see counselor)

ASTRO-128 The Universe for Beginners
4 units LR
54 hours lecture / 54 hours laboratory per term
Recommended: MATH 110 or equivalent, and eligibility for ENGL 122 or equivalent
This course provides an overview of the universe, our current state of knowledge and the methods astronomers use to arrive at their conclusions. Students will observe the sky and physical phenomena and will solve astronomical problems to solidify their knowledge and skills. The Internet will be used extensively. CSU, UC (credit limits may apply to UC - see counselor)

ASTRO-130 Astronomy Laboratory
1 unit LR
54 hours laboratory per term
Recommended: ASTRO 110 or 120 or equivalent (may be taken concurrently)
The laboratory experience will involve the study of the fundamentals of astronomy and will include investigations of the sun, moon, planets, stars and galaxies. Telescopes and other instruments will be used by students to gather data. Students will analyze data they have collected as well as that collected by others. CSU, UC

ASTRO-298 Independent Study
.5-3 units SC
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered
May be repeated three times
Variable hours
An opportunity for advanced students to pursue special interests under the direction of the faculty. CSU, UC (credit limits may apply to UC - see counselor)

Biological and Health Sciences Division
Dean of Biological and Health Sciences
Science Center 102
925-685-1230 x 2442

Possible career opportunities
Completion of the biology program prepares students for advanced study; for careers in government, industry, or secondary-school teaching. The program also partially satisfies the entrance requirements for medical and dental schools. Career options include: researcher, educator, laboratory technician, botanist, ecologist, and field technician.

BIOSC-101 Fundamentals of Biological Science
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
Note: this course does not include a laboratory. Students requiring or wanting a laboratory to accompany this course should enroll in BIOSC 102
A selection of biological concepts which are relevant to the student and to other college courses. Inquiry into the process of evolution by means of natural selection, cell structure and function, plant and animal growth and development, reproduction, genetics and homeostasis within and among living things, populations and communities. CSU, UC (credit limits may apply to UC - see counselor)

BIOSC-102 Fundamentals of Biological Science
4 units SC
54 hours lecture / 54 hours laboratory per term
Recommended: eligibility for ENGL 122
Note: not open to students who have taken BIOSC 101
Same content as BIOSC 101 with an additional three laboratory hours per week. CSU, UC (credit limits may apply to UC - see counselor)

BIOSC-115 Introduction to Biological Molecules
.5 unit CR/NC
9 hours lecture per term
Recommended: high school chemistry or equivalent
Note: this course is recommended in preparation for, or to be taken concurrently with, BIOSC 119, 120, 130, 131, 139, 140, 146, and NUTRI 115, 160, where some knowledge of elementary biochemistry is assumed. This is an open entry/open exit course.
This self-paced course is an introduction to the molecules important in biological systems. The course covers organic molecules and their functions in living organisms. It is designed to illustrate chemistry concepts used in biology courses. The emphasis is on self-help problems and tests. CSU

Biological science – BIOSC
Diablo Valley College is approved by the California Board of Registered Nurses for continuing education credits (Provider # CEP7992). Biological Science courses which can be used are BIOSC 119, 120, 139, 140 and 146.
BIOSC-116 Human Biology
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
Note: not open to students who have taken BIOSC 117, 120, 139, or 140
The broad concepts and principles of biology as applied to humans. Topics include human evolution, ecology, human genetics, DNA structure and function, disease factors, nutrition and metabolism, growth and development and survey of body systems. CSU, UC (credit limits may apply to UC - see counselor)

BIOSC-117 Human Biology
4 units SC
54 hours lecture / 54 hours laboratory per term
Recommended: eligibility for ENGL 122
Note: not open to students who have taken BIOSC 116, 120, 139, or 140
Same content as Biological Science 116 with an additional three laboratory hours per week. CSU, UC (credit limits may apply to UC - see counselor)

BIOSC-119 Fundamentals of Microbiology
4 units SC
54 hours lecture / 54 hours laboratory per term
Recommended: high school or college chemistry or college biology; BIOSC 115; eligibility for ENGL 122; and MATH 120
Fundamentals of microbiology with an emphasis on microbiology as it pertains to the allied health professions. Topics include: microscopy, cell structure and function, aseptic technique, culture and control of microbes, metabolism, microbial genetics and biotechnology, medical microbiology and immunology, and microbes in the environment. CSU, UC (credit limits may apply to UC - see counselor)

BIOSC-120 Introduction to Human Anatomy and Physiology
5 units SC
54 hours lecture / 108 hours laboratory per term
Recommended: high school or college chemistry or one term high school or college biology, and eligibility for ENGL 122
The structure and function of the human body stressing the levels of organization within the body, relationship between structure and function, and importance of maintaining relatively stable internal conditions for health and some health consequences resulting from loss of this stability. Hands-on laboratory work including microscopy, experiments, and dissection (including cadavers) reinforces the lecture material. CSU, UC (credit limits may apply to UC - see counselor)

BIOSC-126 Nature Study and Conservation
4 units SC
54 hours lecture / 54 hours laboratory per term
Recommended: eligibility for ENGL 122
Identification, structure, adaptations, life history, habits, habitat, economic status, and conservation of common plants and animals are studied through lecture, field, and laboratory work. This course covers conservation of natural resources such as land, water, forests and wildlife. CSU, UC

BIOSC-130 Principles of Biology
5 units SC
54 hours lecture / 108 hours laboratory per term
Prerequisite: CHEM 120 or equivalent
Recommended: eligibility for ENGL 122
Note: generally, BIOSC 130 and 131 can be taken in either order or concurrently, however, for students with little or no background in biology. BIOSC 130 is recommended before BIOSC 131.
A study of universal biological processes with emphasis upon the cellular level of organization. Topics include cellular morphology and ultrastructure, enzyme structure and function, biochemical pathways, cell division, replication, transcription and translation, genetics and evolution, embryology, homeostasis and selected topics in physiology. CAN BIOL 2, BIOSC 130+131 = CAN BIOL SEQ A, CSU, UC

BIOSC-131 Principles of Biology
5 units SC
54 hours lecture / 108 hours laboratory per term
Prerequisite: CHEM 120
Recommended: eligibility for ENGL 122
Note: generally, BIOSC 130 and 131 can be taken in either order or concurrently, however, for students with little or no background in biology. BIOSC 130 is recommended before BIOSC 131.
A study of universal biological processes with emphasis on the whole organism and higher levels of organization. The course is formed around three main Biological Principles: Evolution, Unity/Diversity of Life, and Ecology. Topics include: evidence and mechanisms of evolution, speciation, origins of life and the cell, evolutionary history and diversity of life; general, population and community ecology; ecosystems and environmental concerns. The laboratory covers the same themes with hands-on observations, laboratory activities and field exercises. BIOSC 130+131 = CAN BIOL SEQ A, CSU, UC

BIOSC-139 Human Anatomy
5 units SC
54 hours lecture / 108 hours laboratory per term
Recommended: one term college Biology; eligibility for ENGL 122
The physical structure of the human body as an integrated unit is studied. The course content is appropriate for majors in Physical and Health Education; Nursing; Physical, Occupational and Respiratory Therapy; Paramedical; Physician Assistant programs. Microscopy, mammals, cadavers, models, charts, and student self-reference are used throughout the course. CAN BIOL 10 BIOSC 139+140 = CAN BIOL SEQ B, CSU, UC (credit limits may apply to UC - see counselor)

BIOSC-140 Introduction to Human Physiology
5 units SC
54 hours lecture / 108 hours laboratory per term
Prerequisite: one year high school or college chemistry; BIOSC 139 (may be taken concurrently)
Recommended: BIOSC 115; one term college biology; eligibility for ENGL 122 and MATH 120
The lectures are designed to help students understand the physiological mechanisms of the human body. Special emphasis will be given to regulatory mechanism on the cell and organ-system
level employing chemical, mathematical and physical principles. The laboratory section will focus on the application, analysis and evaluation of major physiological principles using molecular technologies, bioelectronics, computer analysis, and/or live organisms. CAN BIOL 12, BIOSC 139+140 = CAN BIOL SEQ B, CSU, UC (credit limits may apply to UC - see counselor)

**BIOSC-146 Principles of Microbiology**
- 5 units SC
- 54 hours lecture / 108 hours laboratory per term
- Prerequisite: one semester college chemistry
- Recommended: eligibility for ENGL 122; MATH 120; BIOSC 115

Topics include microscopy, aseptic technique, culture, control and identification of microbes, taxonomy, bacterial biochemistry, metabolism and physiology, cell structure and function, microbial genetics, recombinant DNA and biotechnology, viruses and their life cycles, microbial ecology, immunology, epidemiology and disease. CAN BIOL 14, CSU, UC (credit limits may apply to UC - see counselor)

**BIOSC-150 Topics in Biology**
- 3-4 units SC
- May be repeated three times
- Variable hours
- Recommended: eligibility for ENGL 122 or equivalent

A supplemental course in biology to provide a study of current concepts and problems in biology and related subdivisions. Specific topics will be announced. CSU, UC (credit limits may apply to UC - see counselor)

**BIOSC-160 Introduction to Marine Biology**
- 4 units SC
- 54 hours lecture / 54 hours laboratory per term
- Recommended: eligibility for ENGL 122

Marine biology is a study of the marine environment, the organisms that live there, and the ecological relationships (including human) that influence the balance of this important ecosystem. Field trips and laboratory exercises will emphasize marine organisms of California along with the equipment and techniques used to study them. CSU, UC

**BIOSC-170 Environmental Science**
- 3 units SC
- 54 hours lecture per term
- Recommended: BIOSC 101 or 102 or equivalent; eligibility for ENGL 122 equivalent
- Note: class trips may be organized to local sites related to course topics

An introductory course designed to expose students to environmental science. This course will examine human interactions with the environment and their consequences for living and nonliving systems. Topics include evolution, ecology biodiversity, human population dynamics, natural resource use, pollution, environmental degradation, risk and human health, and environmental policy. CSU, UC

**BIOSC-205 Introduction to Plant Biology**
- 4 units SC
- 54 hours lecture / 54 hours laboratory per term
- Recommended: eligibility for ENGL 122

The dynamics of plants including structure and function. The application of current understandings in plant science to promote successful plant growth and development. CSU, UC

**BIOSC-210 Field Biology**
- 3 units CR/NC
- May be repeated three times
- 36 hours lecture / 54 hours laboratory per term
- Recommended: BIOSC 101 and 102 or equivalent; eligibility for ENGL 122
- Note: This course may be repeated when student is completing a different project report or a different habitat is studied

This is a hands-on methods course where students learn techniques for assessing living and nonliving components of ecosystems. This course is intended to introduce students to special methods of characterizing environmental conditions and features, taking effective field notes, sampling plants and animals in aquatic and terrestrial systems, and testing soil, water and other physical parameters of local ecosystems. Students will apply statistical methods for analyzing field data and prepare environmental assessment reports. CSU

**BIOSC-216 Natural History of Lassen Volcanic National Park**
- 1 unit SC
- 9 hours lecture / 27 hours laboratory per term
- Recommended: eligibility for ENGL 122 or equivalent

This short-term course gives an overview of the biological, geological, and historical aspects of Lassen National Park. Emphasis is on common plant and animal identification and the ecology of the area. Much of the course consists of field experiences at local sites and at Lassen National Park. A weekend field trip to Lassen National Park is a fundamental component of the course. CSU

**BIOSC-217 Natural History of Mount Diablo**
- 1 unit SC
- 9 hours lecture / 27 hours laboratory per term
- Recommended: eligibility for ENGL 122 or equivalent

This short-term course gives an overview of the biological, geological, and natural history of Mount Diablo State Park. Emphasis is on common plant and animal identification and the ecology of the area. Much of the course consists of field experiences at local sites. CSU

**BIOSC-218 Natural History of Yosemite National Park**
- 1 unit SC
- 9 hours lecture / 27 hours laboratory per term
- Recommended: eligibility for ENGL 122 or equivalent

This short-term course gives an overview of the biological, geological, and historical aspects of Yosemite National Park. Emphasis is on common plant and animal identification and the ecology of the area. Much of the course consists of field experi-
ences at local sites and at Yosemite National Park. A weekend field trip to Yosemite National Park is a fundamental component of the course. CSU

**BIOSC-239 Advanced Dissection**  
1-3 units  CR/NC  
*May be repeated once*  
Variable hours  
Formerly BIOSC-141  
Prerequisite: BIOSC 120 or BIOSC-139 or equivalent  
The course is intended for those students who have demonstrated an interest and aptitude for cadaver dissection. The students will be expected to guide beginning students in cadaver dissection. In addition students will demonstrate their technique with a special dissection project. CSU

**BIOSC-298 Independent Study**  
.5-3 units  SC  
*May be repeated three times*  
Variable hours  
Prerequisite: submission of an acceptable, educational contract to department and instruction office; topics must extend beyond course offered  
Recommended: previous course in the Biological Sciences  
An opportunity for advanced students to study special interests under the direction of the faculty. CSU, UC (credit limits may apply to UC - see counselor)

**Broadcast communication arts – BCA**

Applied and Fine Arts Division  
Dean of Applied and Fine Arts  
Humanities Building, 112 and 113  
925-685-1230 x 2312

**Possible career opportunities**  
Students majoring in BCA enter broadcasting, cable, online media, and related industries. They can pursue graduate degrees in the field of mass or electronic communication for work in audio and video production, web development, radio and television, cable television, and media departments of agencies, institutions, and businesses.

**Associate in arts degree**  
Broadcast communication arts

**Certificate of achievement**  
Broadcast communication arts

**Associate in arts degree - Broadcast communication arts**  
The associate degree program in broadcast communication arts is designed as a two year curricular pathway that offers a broad general education while preparing students for entry-level positions in the broadcast communication industries such as: associate producer, assistant director, on-camera talent, camera operator, sound technician, video switcher, floor director, videotape editor, production assistant, radio board operator, radio producer, radio production engineer, and radio on-air talent.

Students must complete each of the required courses with a “C” grade or better. Required courses can only be completed by attending a combination of day and evening classes. Certain courses may satisfy both a major and a DVC general education requirement; however, the units are only counted once. Selected courses in the program may also meet some lower division requirements for Bachelor of Arts programs at certain California State University campuses. Students who intend to transfer are advised to consult with a counselor regarding specific requirements.

**general education requirements** ........................................27-38

**major requirements** ..........................................................3

**plus a minimum of 3 units from:**  
BCA 110 Introduction to Radio Production 3
BCA 150 Music Video Production 3

**plus a minimum of 3 units from:**  
COOP 170 Occupational Work Experience Education.. 1-4
MULTM 195 Applied Production for Digital Media 3

**plus at least 6 units from:**  
BCA 298 Independent Study 3
BUSMK 255 Advertising 3
DRAMA 122 Basic Principles of Acting 3
DRAMA 123 Intermediate Principles of Acting 3
DRAMA 124 Advanced Principles of Acting 6
DRAMA 126 Acting on Camera 3
ELTRN 116 Introduction to Electronics 2-4
ENGL 151 The Short Story 3
ENGL 152 The Short Film 3
FILM 180 Comparative Film Studies 3
FILM 280 Introduction to Film: American Cinema 1900-1950 3
FILM 281 Introduction to Film: World Cinema 1900-1960 3
FILM 282 Introduction to Film: American Cinema 1950 to the Present 3
FILM 290 Film and TV Script Writing 3
FILM 292 Fundamentals of Film Making- Beginning 3
MULTM 111 Digital Imaging Process and Technique II 1.5
MULTM 115 Digital Imaging Process and Technique III 3
MULTM 149 Introduction to Digital Video 1.5
MULTM 170 Multimedia for Web Delivery 3
SPCH 148 Performance of Literature 3

**Total units for the major** 31.5
To assist students in planning their schedules, Diablo Valley College has prepared a list of courses to be offered at a minimum each semester. This list is subject to change due to fiscal constraints and availability of staff and/or facilities, but it should help you in planning your schedule. By scheduling your classes according to this course sequencing guide, you will be able to finish the major requirements/certificate of achievement in broadcast communication arts requirements in two years, depending on the number of units you take each semester. Verify offerings with college counselors, program faculty, and the on-line schedule of classes. Students should also meet with a counselor or program advisor to plan their schedule.

**Broadcast communication arts course sequence**

<table>
<thead>
<tr>
<th>X= semester offered</th>
<th>recommended sequence</th>
<th>units</th>
<th>fall</th>
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<td>BCA 120 1st semester</td>
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<td>BCA 125 3rd semester</td>
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Selected courses in the program may meet some lower division requirements for the Bachelor of Arts program at certain California State University campuses. Consult with department faculty or a college counselor for more information.

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BCA-120 Introduction to TV Production Techniques
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
An introduction to multi-camera studio television production techniques through demonstration and practice in switching, camera operation, audio, video tape, floor managing, directing, teleprompting, and producing. CSU

BCA-121 Beginning TV Directing
1 unit SC
18 hours lecture per term
Recommended: eligibility for ENGL 122
An introduction to the theory and practice of television directing, exploring program formats through lecture and practice in multi-camera studio directing. CSU

BCA-125 Electronic Field Production
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course covers the technical and aesthetic elements of electronics field production: shooting, recording, editing, lighting, production and post-production. The course emphasizes a hands-on approach to television program design and production. CSU

BCA-126 Intermediate Electronic Field Production
3 units SC
54 hours lecture per term
Prerequisite: BCA 125 or equivalent
A course designed to increase the student’s skills in producing and directing Electronic Field Production based programs, including preproduction planning, scripting, program concepts, directing, shooting and editing. CSU

BCA-130 Intermediate TV Studio Production
3 units SC
54 hours lecture per term
Prerequisite: BCA 120 or equivalent
Recommended: eligibility for ENGL 122 or equivalent
An intermediate class designed to advance the student’s skills in producing and directing TV programs and operating television equipment. The emphasis will be on producing and directing programs for cable casting. Designed to prepare students for positions in broadcast and cable TV as well as industrial television production facilities. CSU

BCA-132 Advanced TV Studio Production
3 units SC
54 hours lecture per term
Prerequisite: BCA 130 or equivalent; eligibility for ENGL 122 or equivalent
An advanced class designed to increase the student’s skills in producing and directing TV programs and operating television equipment. The emphasis will be on producing and directing programs for cable casting. Designed to prepare students for positions in broadcast and cable TV as well as industrial television production facilities. CSU

BCA-140 History of Broadcasting
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This is a survey course designed to provide the student with a fundamental knowledge of the history, trends, and the impact of electronic media on American society. Topic areas include: the role of government, radio and television regulation, cultural influences of media, advertising, commercial and noncommercial broadcasting, domestic and global audiences, emerging technologies, the Internet, and future uses of broadcast media. CSU

BCA-150 Music Video Production
3 units SC
54 hours lecture per term
Recommended: BCA 165 or equivalent, eligibility for ENGL 122 or equivalent
In this course, students will learn to produce music videos. Students will start with an audio master then utilizing single or multi-camera production methodologies produce a music video. Concept, design and implementation will be significant elements of the course content. CSU

BCA-165 Electronic Video Editing
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
An introduction to the techniques and aesthetics of video and digital editing. Students will learn how to edit with linear and nonlinear computerized systems and become familiar with various online and offline editing techniques. CSU

BCA-166 Intermediate Electronic Editing
3 units SC
54 hours lecture per term
Prerequisite: BCA 165 or equivalent
Recommended: eligibility for ENGL 122 or equivalent
An intermediate class designed to advance the students’ skills in non-linear electronic editing. The emphasis will be on utilizing software applications such as Avid and Final Cut Pro. CSU

BCA-180 Television and Film Lighting
3 units SC
May be repeated once
36 hours lecture / 54 hours laboratory per term
An introduction to television and film lighting for studio and location productions. Students will learn to use a wide variety of lighting instruments, how to light typical situations, to solve common lighting problems, use of light meters and to make aesthetic choices part of the storytelling process. CSU
BCA-190  Topics in Broadcast Communication  Arts  
3-4 units  SC  
May be repeated three times  
Variable hours  
This is a supplementary course in broadcast communication arts, designed to provide a study of topics and current problems not covered in the regular broadcast communication arts curriculum. CSU

BCA-260  American Ethnic Images in Television  
3 units  SC  
54 hours lecture per term  
Recommended: eligibility for ENGL 122 or equivalent  
This course will evaluate and explore various American cultures: African American, American Indian, Asian American, Hispanic, and European American as represented in American Television. It will analyze similarities and differences paying particular attention to social and cultural representations. In addition, the course will include issues specific to the world of Broadcasting Television including how television communicates ideas and stimulates emotional responses, while FCC regulations and marketing practices limit what can be broadcast. CSU

BCA-290  Beginning Writing for Electronic Media  
3 units  SC  
54 hours lecture per term  
Recommended: eligibility for ENGL 122 or equivalent  
Students in this course will learn to write for multimedia and short-form electronic formats such as news, product introductions, sports and reality programming. The emphasis would be on scripts no longer than five minutes in length that rely on field production images, animation or combinations. Numerous writing assignments and exercises will be assigned with the intent of developing a student’s ability to write for a short-form visual medium. The course will include libel and slander laws and emphasize proper format as well as content. CSU

BCA-298  Independent Study  
.5-3 units  SC  
May be repeated three times  
Variable hours  
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend beyond courses offered  
An opportunity for students to pursue special interests under direction of the faculty.

Certificates of achievement  
Accounting  
Management studies  
Office professional  
Real estate  
Real estate broker’s license  
Retailing  
Small business management

Certificates of completion  
Real estate salesperson’s license

BUS-101  Business English  
3 units  SC  
54 hours lecture per term  
Recommended: eligibility for ENGL 122  
A study of the English language from a business approach involving grammar, punctuation, spelling, business vocabulary, and sentence structure. This course is required for the Office Professional Certificate of Achievement. CSU

BUS-103  Applied Business Mathematics  
3 units  SC  
54 hours lecture / 18 hours laboratory by arrangement per term  
Recommended: eligibility for ENGL 122 or equivalent  
An examination of key concepts and applications of mathematics to solve business problems. Topics include banking, trade and cash discounting, markups and markdowns, simple and compound interest, payroll, consumer finance, and analysis of financial reports. CSU

BUS-105  Business Etiquette  
1 unit  SC  
18 hours lecture per term  
A study of the principles of etiquette for the business professional. Students will engage in activities which will cover introductions, shaking hands, exchanging business cards, listening, conversational techniques, diplomacy, manners, proximity, telephone manners, office equipment and technology etiquette, professional appearance, grooming, gift giving, entertainment, handling social events, business travel, meeting protocol, dining, tipping, showing appreciation, etiquette, and intercultural business etiquette. CSU

BUS-109  Introduction to Business  
3 units  SC  
54 hours lecture per term  
Recommended: eligibility for ENGL 122  
This survey course provides an introduction to the study of the modern business enterprise. Included will be an examination of the role of business in a market economy; the evolution, formation, and management of American and international operations; the financial, legal, and environmental issues affecting business decisions; the use of information and technology in business decision-making; and the part marketing plays in developing, pricing, promoting, and distributing products. CSU, UC
BUS-115  Business E-Mail and Digital Communication  
1 unit  SC  
18 hours lecture per term  
Recommended: eligibility for ENGL 122 or equivalent  
This course will cover one of the most important corporate communication tools: e-mail. Students will learn how to prepare professional, high-quality e-mail messages for both internal and external audiences. In addition, students will learn how to use their e-mail programs to attach single and multiple files, open attached files, use an address book, build and insert a signature file, insert hyperlinks, use spell check, reply to messages, forward messages, and manage messages. The course will also cover safety issues regarding viruses and phishing, e-mail etiquette, and advanced e-mail topics such as return receipts, digital signatures and certificates, avoiding spam, and disclaimers. The course will also cover other forms of digital communication, including instant messaging, audio conferencing, videoconferencing, Web conferencing, and blogging. Students will learn how these tools are used in the workplace and how to use them professionally and effectively. CSU

BUS-150  Topics in Business  
3-4 units  SC  
May be repeated three times  
Variable hours  
A supplemental course in business to provide a study of current concepts and problems in business and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

BUS-161  Personal Money Management  
3 units  SC  
54 hours lecture per term  
Recommended: BUS 103 or equivalent; eligibility for ENGL 122 or equivalent  
An introductory course for planning and managing individual finances and for money management. Topics will include purchasing decisions, sources of credit, personal tax strategies, budgeting, saving, investing in real estate and securities, insuring personal resources and retirement planning. CSU

BUS-209  International Business  
3 units  SC  
54 hours lecture per term  
Recommended: BUS 109 or equivalent; eligibility for ENGL 122 or equivalent  
An overview of the theories and practices of modern international businesses. This course examines the key functional areas related to global businesses, including international marketing, finance and management, as well as the political, social, economic and cultural factors that help shape and influence today’s international business environment. Students will be able to get hands-on international business experience through developing a market entry strategy for a local business to enter a particular foreign country or region. CSU

BUS-240  Business Statistics  
3 units  SC  
54 hours lecture / 18 hours laboratory by arrangement per term  
Prerequisite: MATH 120 or equivalent  
Business Statistics is an introduction to concepts, methods and models employed in reasoning with numbers and in presenting cogent statistical arguments or solutions. The course introduces students to the organization, analysis and inference-making processes, using sample data to graphically and numerically describe samples. The course details how to estimate confidence intervals, test hypotheses and develop projections for inferential purposes in a variety of contexts and disciplines such as business, social science, biology, economics, and health science. Many different probability distributions are covered: binomial, normal, student t, chi-square, F-distribution and others. Estimating simple and multiple regressions and making inference from such analysis is another major theme of this course. CSU, UC (credit limits may apply to UC - see counselor)

BUS-250  Business Communications I  
3 units  SC  
54 hours lecture per term  
Recommended: BUS 101 or equivalent; eligibility for ENGL 122 or equivalent  
Note: strongly recommended for all business administration, office professional, and management students  
A course designed to help students develop the skills necessary to communicate effectively in a professional business environment. The focus will be on communicating clearly, concisely, considerately, and correctly, both orally and in writing. Students will learn to prepare basic business documents, including letters, memos, and short reports; to use basic technology to communicate, including email and discussion boards; and to prepare and deliver short oral presentations. The course will also contain an introduction to employment communication, including resumes, application letters, and interview skills. Emphasis throughout the course will be placed on intercultural communication and the ethics of communication. CSU

BUS-255  Advanced Business Communications II  
3 units  SC  
54 hours lecture per term  
Recommended: BUS 101 or equivalent; BUS 250 or equivalent; eligibility for ENGL 122 or equivalent  
An advanced course designed to help students continue to develop and refine skills necessary to communicate effectively in a professional business environment. The focus will be on communicating clearly, concisely, considerately, and correctly, both orally and in writing. Students will learn to prepare advanced business documents, including sales letters, proposals, and research reports; to use advanced technology to communicate, including mailing lists, virtual chat rooms, basic Web site development, and audio- and videoconferencing equipment; and to prepare and deliver complex multimedia presentations. The course will also contain segments on documenting resources properly; conflict resolution; negotiation techniques; meeting management; and utilizing the Internet for job searching and networking. Emphasis throughout the course will be placed on intercultural communication and the ethics of communication. CSU
BUS-261 Investments
3 units SC
54 hours lecture per term
Recommended: BUS 109
A comprehensive course that: 1) overviews and explores the function and structure of financial markets and financial assets; 2) develops an understanding of how to value different financial assets or select the best investment opportunities; and 3) learns proper gathering and employment of relevant financial information in financial decision making. CSU

BUS-291 Wills, Trusts, and Estate Planning
1.5 units SC
27 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course will provide an introduction to the areas of business law concerned with wills, trusts, and estate planning. Students will learn about living trusts, probate avoidance, joint tenancy, estate taxes, asset control, wills, and power of attorney. In addition, students will learn how to prepare various types of wills for personal use, how to make health-care decisions, and how to create durable powers of attorney. The course will also cover advanced topics such as estate planning and various types of trusts. CSU

BUS-294 Business Law
3 units SC
54 hours lecture per term
Recommended: BUS 109 or equivalent, eligibility for ENGL 122 or equivalent
Provides a general overview of the specific areas of the legal environment that effect individuals and businesses. Major emphasis on contracts, including the Uniform Commercial Code, Article 2. Other subjects studied may include legal history, civil procedure, constitutional law, torts, intellectual property, cyber law, criminal law, international law, labor and employment law, and agency. CAN BUS 8-12, CSU/LC

BUS-296 Mediation and Arbitration
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 118
An introduction to the use and practice of alternative processes for the prevention and resolution of commercial and noncommercial disputes. These processes include conciliation, mediation, arbitration, mini-trial, summary jury trial and other advisory techniques including fact-finding. Topics covered in lectures, simulations, and readings include interviewing and counseling, the roles of lawyers and courts, local and national laws on arbitration and mediation, negotiation, and simulations involving the laws of tort, contract, property, Uniform Commercial Code, and criminal law pertaining to commercial transactions. The course emphasizes the advantages over litigation relative to confidentiality, costs, the preservation of beneficial business relations, and the neutrality of the intermediary in the use of the Alternative Dispute Resolution (ADR) process. CSU

BUS-298 Independent Study
.5-3 units LR
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered
Selected students may pursue independent study of a particular aspect of business under the guidance of the business faculty. CSU

Possible career opportunities
The accounting certificate prepares students to seek employment or career advancement in public, private and governmental institutions. The coursework provides the basics for an advanced degree that can lead to a career as an account clerk, auditing clerk, accountant, auditor, analyst, tax preparer, cost accountant, financial service representative, and as an insurance agent or representative. Certificate holders can also work as a bookkeeper for: accounts receivable, accounts payable, payroll, and general ledger.

Certificate of achievement - Accounting
Students will develop the knowledge and skills required of an accountant: compiling and analyzing business records and preparing financial reports such as income statements, balance sheets, cost studies, and tax reports.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better. Certificate requirements are available in the evening and on weekends. Some are also available in the day. At least 25 percent of the units must be completed at DVC. Requests for course substitution are made to the accounting and information management department chairperson.

required courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>BUSAC 185  Computer Accounting for Business I</td>
<td>1.5</td>
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<tr>
<td>BUSAC 186  Principles of Accounting I</td>
<td>3</td>
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<tr>
<td>BUSAC 187  Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>BUSAC 282  Intermediate Accounting</td>
<td>3</td>
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<tr>
<td>BUSIM 145  Business Spreadsheet Applications</td>
<td>2</td>
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plus at least 9 units from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>BUS 294   Business Law</td>
<td>3</td>
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<tr>
<td>BUSAC 283  Auditing</td>
<td>3</td>
</tr>
<tr>
<td>BUSAC 284  Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUSAC 285  Federal Income Taxes-Individuals</td>
<td>3</td>
</tr>
<tr>
<td>BUSAC 286  Governmental and Not-for-Profit Accounting</td>
<td>3</td>
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</table>

plus at least 6 units from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>BUS 109   Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 209   International Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 240   Business Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>
Bus 250 Business Communications I ........................................ 3
Busmg 191 Small Business Management ................................. 3
Econ 220 Principles of Macroeconomics ............................... 3
Econ 221 Principles of Microeconomics ............................... 3

Total units required ................................................... 27.5

BUSAC-150 Topics in Business Accounting
0.3-4 units SC
May be repeated three times
Variable hours
A supplemental course in Business Accounting to provide a study of current concepts and problems in Business Accounting and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

BUSAC-181 Applied Accounting
3 units SC
54 hours lecture / 18 hours laboratory by arrangement per term
Recommended: Bus 103 or equivalent; eligibility for ENGL 122 or equivalent
Note: This course is a recommended primer for the BUSAC-186 “business major” transfer course
A beginning accounting course. Involves a practical approach emphasizing small business applications. Covers the accounting cycle for a service business and a merchandising business. Includes journals and ledgers; financial statements; adjusting, correcting, and closing entries; bank reconciliation; payroll calculations for interest, discounts, sales, and payroll taxes. Also includes an introduction to the use of a microcomputer as an accounting tool. CSU

BUSAC-182 Computer Income Tax Return Preparation - Individuals
1.5 units SC
May be repeated once
18 hours lecture / 9 hours laboratory / 18 hours laboratory by arrangement per term
Recommended: BUSAC 285 or equivalent; eligibility for ENGL 122 or equivalent
Note: Course may be repeated when software program or online filing system changes
This is a course that uses a popular tax software program or online filing system to prepare income tax returns for an individual. Topics will include the basic tax formula, filing status, exemptions, dependents and the procedures for creating a taxpayer file and processing income, deductions, credits, capital gains and losses, and business activities to produce a final tax return. CSU

BUSAC-185 Computer Accounting for Business I
1.5 units SC
May be repeated once
18 hours lecture / 9 hours laboratory / 18 hours laboratory by arrangement per term
Recommended: completion of at least one half (1/2) of BUSAC 181 or 186 or equivalent; eligibility for ENGL 122
An introductory course to computer accounting for business. Applies basic accounting knowledge and theory to a computer environment. Includes sales, invoicing and receivables, payables and purchases, general accounting, financial statements, and end-of-period procedures for a service business. CSU

BUSAC-186 Principles of Accounting I
3 units SC
54 hours lecture / 18 hours laboratory by arrangement per term
Recommended: eligibility for ENGL 122 or equivalent
Note: Students seeking an introduction to computer accounting techniques should register for the computer course BUSAC 181
A theory and procedures course required for many business administration and accounting majors. Introduction to fundamental financial accounting principles, theory, concepts and procedures as the basis of an information system. Includes the role of financial information in business decisions, basic financial statements and the processes used to prepare these financial statements. CAN BUS 4 BUSAC 186+187 = CAN BUS SEQ A, CSU, UC

BUSAC-187 Principles of Accounting II
3 units SC
54 hours lecture / 18 hours laboratory by arrangement per term
Prerequisite: BUSAC 186 or equivalent
A second semester theory and procedures course required for many business administration and accounting majors. Emphasis is on fundamental managerial accounting concepts that aid in decision making, performance evaluation, planning and cost control. CAN BUS 4 BUSAC 186+187 = CAN BUS SEQ A, CSU, UC

BUSAC-188 Computer Accounting for Business II
1.5 units SC
May be repeated once
18 hours lecture / 9 hours laboratory / 18 hours laboratory by arrangement per term
Recommended: completion of BUSAC 185 or equivalent; eligibility for English 122 or equivalent
Note: Course may be repeated when software program changes
A second level course in computer accounting for business using a recognized software program. Focus will be on developing skills for creating a set of records and applications for a merchandising business including sales and receivables, payables and purchases, and end of period procedures. Topics will also include payroll and payroll tax reporting and related preparation of employee earnings reports. CSU

BUSAC-190 Payroll Accounting
1.5 units SC
27 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course will cover one of the most important accounting functions: payroll. Students will learn how to calculate wages, determine required employer and employee tax deductions, process payroll, and file required reports. The course will also cover employment legislation and tax laws that affect payroll. CSU
BUSAC-282 Intermediate Accounting
3 units SC
54 hours lecture / 18 hours laboratory by arrangement per term
Prerequisite: BUSAC 186 or equivalent
Recommended: BUSAC 187 or equivalent
An advanced level financial accounting course that reviews and builds on the foundation material presented in Principles of Accounting I. Emphasizes financial accounting concepts and reporting issues in association with financial statement preparation and interpretation. CSU

BUSAC-283 Auditing
3 units SC
54 hours lecture / 18 hours laboratory by arrangement per term
Prerequisite: BUSAC 186 or equivalent
Recommended: BUSAC 187 or equivalent
Concepts of auditing and examination of accounting records. Auditing standards and procedures including internal controls, sampling, substantive tests, and reporting. CSU

BUSAC-284 Cost Accounting
3 units SC
54 hours lecture / 18 hours laboratory by arrangement per term
Prerequisite: BUSAC 186 or equivalent
Recommended: BUSAC 187 or equivalent
Explores the accountant's role in the decision making process. Emphasis on the determination, collection and analysis of cost information as it relates to planning and control. Job order costing, process costing, standard costing, other current costing methods, analysis of variances and analysis of cost information are included in this course. CSU

BUSAC-285 Federal Income Taxes-Individuals
3 units SC
54 hours lecture / 18 hours laboratory by arrangement per term
Prerequisite: BUSAC-186 or equivalent
Recommended: BUSAC 187 or equivalent
An exploration of the framework of the federal tax system. Application and analysis of the Internal Revenue Code, regulations, rulings and court cases. This course concentrates on federal income tax law for individuals and includes problem solving, perspectives on tax saving, and tax planning techniques. Introduction to tax preparation software is provided. CSU

BUSAC-286 Governmental and Not-For-Profit Accounting
3 units SC
54 hours lecture / 18 hours laboratory by arrangement per term
Prerequisite: BUSAC-186 or equivalent
Recommended: BUSAC 187 or equivalent
A study of accounting, budgeting, fiscal procedures and financial records of governmental agencies and private not-for-profit organizations. CSU

BUSAC-290 Corporate Financial Reporting and Financial Statement Analysis
3 units SC
54 hours lecture / 18 hours laboratory by arrangement per term
Prerequisite: BUSAC 282 or equivalent
Recommended: eligibility for ENGL 122 or equivalent
This course develops sophisticated uses of financial statements by providing an overview of the use of financial accounting information for evaluating past performance and predicting future performance of a company. The focus will be on understanding and analyzing the financial statements of a firm and supporting notes, rather than preparing them. The course also focuses on estimating the value of publicly traded common stocks using models developed for this purpose. The course teaches the importance of the accounting methods used by the firm and develops a framework to examine the economic environment in which the firm operates to determine its sources of value and the financial and environmental risks that it faces. CSU

BUSGR-214 Introduction to Graphic Design
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
A beginning graphic design class focusing on idea development; visual presentation concepts, basic business reproduction techniques and evaluation of marketing strategy. A hands-on traditional design course where the student can acquire an ability to create business design solutions as a prelude to and with computers. CSU

BUSGR-221 Graphics/Production Techniques
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
An intensive, hands-on course introducing the basic skills and techniques necessary to achieve professional and satisfying results in the printing of graphic communications, from black and white to four-color process printing. CSU

BUSGR-224 Graphics/Type/Publication Design
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
The first nine weeks deals with type, how to get it, and how to use it effectively. The second nine weeks emphasizes using these skills to design a newsletter. The course material is applicable to any publication: book, magazine, newspaper, brochure, etc. CSU
BUSGR-225 Graphics/Advertising Design
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
An introduction to basic advertising design and layout with an emphasis on principles of visual communication that formulate the underlying framework upon which successful print advertising is based, including the layout and design of magazine advertising and advertising collateral, such as brochures, direct mail, outdoor, and transit advertising. CSU

BUSIM-025 ESL Keyboarding
1 unit CR/NC
May be repeated once
Not degree applicable
18 hours lecture / 18 hours laboratory per term
Note: CELSA recommendation for ESL 076 or higher class; for absolute beginners
A beginning computer keyboarding/word processing course for students who are non-native speakers. Students will learn how to operate the computer keyboard by touch and to use a word processing program for creating basic reports.

BUSIM-070 Office Technology Workshops and Seminars
.5 unit CR/NC
May be repeated three times
Not degree applicable
18 hours lecture per term
Note: software used for instruction will vary; see class schedule for software used
Introductory workshops and seminars in office technology topics scheduled throughout the year. Topics will change to respond to interests of the business community.

BUSIM-072 Workshops and Seminars: Introduction to Word Processing
.5 unit CR/NC
May be repeated once
Not degree applicable
18 hours lecture per term
Recommended: BUSIM 070 or COMSC 075 or equivalent keyboard experience
Note: software used for instruction will vary; see class schedule for software used
Introductory microcomputer word processing workshops and seminars in office technology topics scheduled throughout the year. Software packages will change to respond to interests of the business community.

BUSIM-075 Business Training Workshops-Level I
.5-1 unit CR/NC
May be repeated once
Not degree applicable
Variable hours
Recommended: previous Windows experience
Business training workshops to introduce students to business software applications. Fundamental features of the application programs will be introduced, and students will have an opportunity to apply the features to commonly used business documents, presentations, and/or publications. Topics will change to respond to the demand and interests of the business community.

BUSINESS INFORMATION MANAGEMENT–BUSIM
Possible career opportunities
The office assistant curriculum prepares students for employment as an office assistant, office supervisor, medical or legal secretary, event coordinator, word processor, desktop publishing specialist, account assistant, or support team coordinator.

Certificate of achievement - Office professional
This certificate program prepares students for entry-level positions in small and large business offices requiring support staff, such as receptionists, administrative assistants, and general clerical assistance.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a "C" grade or better. Certificate requirements can only be completed by attending both day and evening classes. Course requirements must be completed within three years of entering the program. At least 25 percent of the units must be completed at DVC. Substitutions will be considered on an individual basis.

Changes occur rapidly in the office information and technology environment; therefore, students should meet with an office professional certificate advisor in the business division to determine elective coursework that will assist them in reaching their personal and professional goals.

required courses

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<th>Course</th>
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<tbody>
<tr>
<td>BUS 101</td>
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<td>BUS 103</td>
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<td>BUS 250</td>
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<tr>
<td>BUSAC 181</td>
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<tr>
<td>BUSIM 111</td>
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<td>BUSIM 140</td>
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<tr>
<td>BUSIM 145</td>
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<tr>
<td>BUSIM 211</td>
<td>3</td>
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</tbody>
</table>

elective units determined in consultation with certificate advisor 6-9

Total units required 29-32

Certificate participants must also meet established keyboarding and ten-key skill levels.
Keyboarding speed: 50 wpm; 10-Key: 120 kspm
BUSIM-076 Workshops and Seminars: Word Processing Applications

.5 unit CR/NC
May be repeated once
Not degree applicable
18 hours lecture per term
Recommended: BUSIM 70, BUSIM 72 or equivalent; basic keyboarding skills
Note: software used for instruction will vary; see class schedule for software used
Information and hands-on practice on customizing specific word processing programs for an office; file and disk management techniques; manuscript typing (headers/footers, outlines, footnotes/endnotes, page numbering); columns; merge; forms fill-in; document assembly and graphics features are featured. Office applications are emphasized.

BUSIM-077 Business Training Workshops-Level II

.5-1 unit CR/NC
May be repeated once
Not degree applicable
Variable hours
Recommended: ability to use basic features of software being studied. Additional recommended preparation will vary depending upon the training content and/or business software application
Intermediate to advanced-level business training workshops to introduce students to application features of business software that will enhance productivity and job performance. Topics will change to respond to the interests and demand of the business community.

BUSIM-095 Microcomputer Laboratory Activities

.5 unit CR/NC
May be repeated once
Not degree applicable
20 hours laboratory per term
Recommended: ability to use computers and approval of student projects
Note: open-entry, open-exit
Students may enroll at any time during the term. Supervised use of microcomputer laboratory facilities available through the Office Administration Department. Recommended for students enrolled in all levels of keyboarding, word processing, accounting, etc. Also open to students in other DVC courses who may benefit from computer practice. Upon enrollment, student will sign a contract describing the proposed project for approval by instructor.

BUSIM-096 Keyboard Speed and Accuracy Building

.5 unit CR/NC
Not degree applicable
20 hours lecture per term
Recommended: BUSIM 110 or equivalent
Keyboarding skill improvement for all levels of speed and accuracy.

BUSIM-099 Topics in Business Applications

.25-1 unit CR/NC
May be repeated three times
Not degree applicable
Variable hours
Note: see current schedule of courses for topics offered
Business training workshops presenting business application topics.

BUSIM-110 Keyboarding I: Beginning Keyboarding

3 units SC
36 hours lecture / 18 hours laboratory / 54 hours laboratory by arrangement per term
Recommended: eligibility for ENGL 116/118
A beginning course in keyboarding using the touch method. Personal use and prevocational emphasis on acquiring basic keyboarding skills and on producing documents (reports, letters, tables, etc.) using word processing software. Preparation for learning office production skills. CSU

BUSIM-111 Keyboarding Level II: Intermediate Word Processing and Skill Development

3 units SC
54 hours lecture / 54 hours laboratory by arrangement per term
Recommended: BUS 101 or equivalent and BUSIM 110 or equivalent
Note: see schedule of courses for current software used
This course is the second in the sequence of keyboarding/word processing courses offered. Preparation of common business documents using intermediate to advanced level word processing skills is emphasized. Skill building activities are also included to develop speed and accuracy to employability levels. CSU

BUSIM-140 Records Management and Filing Systems

3 units SC
54 hours lecture / 36 hours laboratory by arrangement per term
Recommended: eligibility for ENGL 122; keyboarding by touch
Basic principles of filing and effective records management applied to various filing systems, using computerized reinforcement of rules. Introduction to database functions such as opening computer files and calculating data fields. CSU

BUSIM-145 Business Spreadsheet Applications

2 units SC
May be repeated once
27 hours lecture / 27 hours laboratory by arrangement per term
Recommended: keyboarding by touch; BUSIM 075E or equivalent; eligibility for ENGL 122
This is a business applications course, which uses a foundation of basic spreadsheet skills to emphasize the solving of
business problems using a commercial spreadsheet program. Business oriented cases and problems will be used to present and reinforce procedures for planning, designing, creating, and preparing worksheets. Preparation of business reports, incorporating graphs and database features, and time saving techniques will also be presented. Development of business problem-solving skill is emphasized. Recommended for employment preparation and upgrading of business skills. CSU

BUSIM-155  Topics in Office Technology and Administration

3-5 units  SC  
Variable hours
A supplemental course designed to provide a study of current technology or techniques in office administration. Specific topics will be announced. CSU

BUSIM-211  Office Procedures and Technology

3 units  SC  
54 hours lecture / 18 hours laboratory by arrangement per term
Recommended: BUS 101 or equivalent and BUSIM 111 or equivalent (may be taken concurrently); eligibility for ENGL 122 or equivalent
A comprehensive course covering the essentials that office professionals must know to succeed in a professional office environment. Students will study all aspects of administrative office work and complete projects that simulate common office situations using various software packages, office equipment, and the Internet. Students will learn how to communicate effectively, process financial information, greet customers, handle multiple phone lines, operate standard office equipment, manage filing, process mail, make travel arrangements, plan meetings, and use the Internet for business research. CSU

BUSIM-231  Medical Terminology

3 units  SC  
54 hours lecture per term
Recommended: eligibility for ENGL 116 / 118
Medical terminology: construction, pronunciation, spelling, definitions, and commonly used abbreviations. CSU

Certificate of achievement - Management studies
This program benefits students preparing to become managers and supervisors, and it is also valuable for persons already holding these positions.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better. Required courses are available in the evening and during the day.

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSMG 120  Introduction to Management Studies</td>
<td>3</td>
</tr>
<tr>
<td>BUSMG 121  Practices and Concepts of Supervision</td>
<td>3</td>
</tr>
<tr>
<td>BUSMG 131  Gender Issues in Management</td>
<td>3</td>
</tr>
<tr>
<td>BUSMG 132  Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>BUSMG 194  Personnel Management</td>
<td>3</td>
</tr>
<tr>
<td>BUSMG 226  Group Dynamics and Leadership</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units required 18

To substitute courses requires department chairperson approval. Substitutions are limited to 6 units outside the management department.

Possible career opportunities
Upon completion of the small business management certificate, students will have built a foundation of business competencies and management strategies that will enable them to succeed as an entrepreneur, small business owner, partner, manager, or inventor.

Certificate of achievement - Small business management
This program is designed to prepare students for planning, organizing, and operating a business in wholesaling, retailing, and technology or service trade. The main thrust of the program is on managerial decision making under conditions of uncertainty and fierce competition. Courses involve studying case histories of decision-making issues and using business and management games to simulate the complicated interrelationships of various businesses.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better. Certificate requirements can be completed by attending in the day, the evening, or both.

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 103  Applied Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>BUS 109  Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 294  Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUSMG 191  Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>BUSMG 192  Entrepreneurship/Venture Management</td>
<td>3</td>
</tr>
<tr>
<td>BUSMG 226  Group Dynamics and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>BUSMK 158  Selling</td>
<td>3</td>
</tr>
<tr>
<td>BUSMK 255  Advertising</td>
<td>3</td>
</tr>
</tbody>
</table>
### Business management

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Type</th>
<th>Hours per Term</th>
<th>Recommended</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSMG-120</td>
<td>Introduction to Management Studies</td>
<td>3</td>
<td>SC</td>
<td>54</td>
<td>BUS 109 or equivalent, ENGL 122</td>
<td>This course is designed as an introduction to the skills and applications used in modern management practice. Topics may include foundation of management principles, planning, organizing, staffing, directing, controlling, legal, ethical, and social responsibilities of management. CSU</td>
</tr>
<tr>
<td>BUSMG-121</td>
<td>Practices and Concepts of Supervision</td>
<td>3</td>
<td>SC</td>
<td>54</td>
<td>eligibility for ENGL 122 or equivalent</td>
<td>This course will provide the student with a real world approach that shows students how management practices and concepts are carried out. Each of the management functions — planning, organizing, influencing, and controlling — will be explained from the standpoint of how each function interrelates to the management process. Student participation includes a variety of management exercises and case study discussions. CSU</td>
</tr>
<tr>
<td>BUSMG-131</td>
<td>Gender Issues in Management</td>
<td>3</td>
<td>LR</td>
<td>54</td>
<td>BUS 109 or equivalent, ENGL 122</td>
<td>An exploration of gender issues in management resulting from the expansion of women’s roles at work during the past decades and the growth of the multicultural workforce. Leadership styles, use of power, mentoring, networking, communicating, team work, discrimination, sexual harassment and family/work balance will be studied in the context of the current diverse workplace. CSU</td>
</tr>
<tr>
<td>BUSMG-132</td>
<td>Human Resource Management</td>
<td>3</td>
<td>SC</td>
<td>54</td>
<td>eligibility for ENGL 122 or equivalent</td>
<td>A comprehensive study of behavior in organizations, from individual behavior and motivation, to team interaction, to large organizational system issues and practices. The course will explore topics including values, individual and group decision making, leadership and communications, conflict, work design, and organizational culture. CSU</td>
</tr>
<tr>
<td>BUSMG-150</td>
<td>Topics in Management Studies</td>
<td>3-4</td>
<td>SC</td>
<td>Variable</td>
<td>eligibility for ENGL 122 or equivalent</td>
<td>A supplemental course in business designed to provide a study of current business problems or activities. CSU</td>
</tr>
<tr>
<td>BUSMG-151</td>
<td>Seminars - Employee Behavior</td>
<td>.5</td>
<td>CR/NC</td>
<td>9</td>
<td>eligibility for ENGL 122</td>
<td>This course provides a framework for participants to learn how to be more effective in their on-the-job relationships, and how to become more proficient in handling a variety of managerial tasks and responsibilities. CSU</td>
</tr>
<tr>
<td>BUSMG-152</td>
<td>Seminars - Human Resources</td>
<td>.5</td>
<td>CR/NC</td>
<td>9</td>
<td>eligibility for ENGL 122</td>
<td>These seminars are designed to enhance proficiency for participants associated with human resources in their organizations and for participants desiring to learn about human resource management. The challenges of human resource management will be introduced along with key concepts, issues, and human resource strategies that impact the success or failure of an organization. CSU</td>
</tr>
<tr>
<td>BUSMG-191</td>
<td>Small Business Management</td>
<td>3</td>
<td>SC</td>
<td>54</td>
<td>BUS 103, 109, eligibility for ENGL 122</td>
<td>An introductory course intended for students who desire to enter, or are already involved in, small business operations. Specialized training in operating various kinds of small businesses. Includes analysis of location, equipment, financing, accounting, credit, merchandising and marketing for retail, manufacturing, or service industries. CSU</td>
</tr>
<tr>
<td>BUSMG-192</td>
<td>Entrepreneurship and Venture Management</td>
<td>3</td>
<td>SC</td>
<td>54</td>
<td>BUS 103, 109, BUSMG 191</td>
<td>This is the second course on small business management with emphasis on problem solving and decision making in the functional and administrative phases of operating a small business. The use of cases and management simulation will provide students with hands-on managerial experience. CSU</td>
</tr>
</tbody>
</table>
BUSMG-194 Personnel Management
3 units LR
54 hours lecture per term
Principles of personnel management designed for persons entering personnel positions in industry, business and government, and for personnel administrators who wish to reevaluate their own techniques, principles, and practices. CSU

BUSMG-226 Group Dynamics and Leadership
3 units LR
54 hours lecture per term
Emphasis on leadership skills and better understanding of group processes with each member taking part in a series of group experiences which enable him to study himself and the group of which he is a part. CSU

Business marketing – BUSMK

Possible career opportunities
In this program, students build a solid foundation in all phases of retailing, merchandising, and management, and are then prepared to work as a salesperson, store manager, merchandiser, account executive, buyer, market researcher, consultant, district manager, or store owner/operator. Some career options may require more than two years of college study.

Certificate of achievement - Retailing
In this program, students build a solid foundation in all phases of retailing, merchandising, and management, and are then prepared to enter middle-management training positions in large organizations or to assume broad responsibilities in small firms.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better. Certificate requirements can be completed by attending in the day, the evening, or both. For further information contact the business administration department.

required courses units
BUS 103 Applied Business Mathematics 3
BUS 109 Introduction to Business 3
BUS 294 Business Law 3
BUSMK 148 Retailing and Merchandising 3
BUSMK 158 Selling 3
BUSMK 255 Advertising 3
BUSMK 256 Marketing 3

plus at least 3 units from:
BUSAC 181 Applied Accounting 3
BUSAC 186 Principles of Accounting I 3

BUSMK-148 Retailing and Merchandising
3 units SC
54 hours lecture per term
Recommended: BUS 103; eligibility for ENGL 122
A comprehensive course that covers the general methods relevant to retail business operation, site location consideration, and staffing. The course also covers merchandising management and promotion. CSU

BUSMK-158 Selling
3 units SC
54 hours lecture per term
Recommended: BUS 109; eligibility for ENGL 122
The theory and practice of effective selling in a business environment with emphasis on the use of the selling process in promoting and distributing products. This course takes a skill-based approach to the discipline of professional selling by allowing students to apply modern selling techniques in model real-life selling situations. CSU

BUSMK-255 Advertising
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
A comprehensive course covering the history and terminology of advertising, and the use and cost of mass media. The course also covers the role of marketing and market research in promotion, as well as current trends in promotion. CSU

BUSMK-256 Marketing
3 units SC
54 hours lecture per term
Recommended: BUS 109 or equivalent; eligibility for ENGL 122 or equivalent
Introduction to marketing functions involved in facilitating the exchange of goods and services. Focus on the analysis of markets: assessment of the marketing environment; formulation of marketing strategy; and development of the marketing mix variables of product, price, promotion, and distribution. Ethical issues considered. CSU

BUSMK-257 Applied Advertising and Promotion
3 units SC
54 hours lecture per term
Recommended: BUSMK 255; eligibility for ENGL 122
This course requires the application of promotion theory through the planning, implementation, and evaluation of a total promotional campaign. Students will work as a group (agency) with one company as a client. Clients set the budget and their promotional objective. Students will conduct research, identify the target market, plan and implement a promotional campaign, and evaluate the results. CSU
BUSMK-298 Independent Study
.5-3 units SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered
Selected students may pursue independent study of a particular aspect of business marketing under the guidance of the business faculty. CSU

Business real estate – RE

Possible career opportunities
Real estate professionals may specialize in selling, appraising, inspecting, financing, managing, or leasing apartment, residential, recreational, commercial, and industrial or farm property. They may provide support services in real estate, such as title services, brokers, appraisers, and market analysis.

Real estate professionals must obtain a state license to practice their profession in California.

Once licensed, a professional can serve as an agent, property manager, developer, licensed broker, appraiser, escrow officer, investment specialist, insurance agent, claims adjuster, and estate administrator. Some career options may require more than two years of college study, or continuing education.

Certificates of achievement
Real estate
Real estate broker’s license

Certificates of completion
Real estate salesperson’s license

Certificate of achievement - Real estate
We offer evening classes for those interested in studying real estate in order to become a better-informed consumer, an investor, or a professional in the field.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better. All required courses are available in the evening.

required courses units
select at least 24 units from:
RE 160 Real Estate Principles ......................... 3
RE 161 Legal Aspects of Real Estate .................. 3
RE 162 Real Estate Appraisal ......................... 3
RE 163 Real Estate Practice .......................... 3
RE 164 Real Estate Finance .......................... 3
RE 165 Real Estate Economics ....................... 3
RE 166 Escrow Procedures .......................... 3
RE 167 Real Estate Property Management .......... 3
RE 262 Real Estate Appraisal II ..................... 3

Total units required 24

Certificate of achievement - Real estate broker’s license
In order to take the required examination for the real estate broker’s license, applicants must complete the required courses in addition to other experience/education requirements. To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better. All required courses are available in the evening and one is also available during the day.

required courses units
RE 161 Legal Aspects of Real Estate .................. 3
RE 162 Real Estate Appraisal ......................... 3
RE 163 Real Estate Practice .......................... 3
RE 164 Real Estate Finance .......................... 3

plus at least 3 units from:
BUSAC 186 Principles of Accounting I ............... 3
RE 165 Real Estate Economics ....................... 3

plus at least 9 units from:
BUS 294 Business Law .................................. 3
RE 160 Real Estate Principles ......................... 3
RE 166 Escrow Procedures .......................... 3
RE 167 Real Estate Property Management .......... 3
RE 262 Real Estate Appraisal II ..................... 3

Total units required 24

Certificate of completion - Real estate
salesperson’s license
In order to take the required examination for the real estate salesperson’s license, applicants must complete Real Estate 160-Principles of Real Estate. Also, either before obtaining their original license or within 18 months after they have obtained it, salespeople must complete two additional basic real estate courses. All required courses can be completed by attending in the evening.

required courses units
RE 160 Real Estate Principles ......................... 3

plus at least 6 units from:
BUS 294 Business Law .................................. 3
BUSAC 186 Principles of Accounting I ............... 3
RE 161 Legal Aspects of Real Estate .................. 3
RE 162 Real Estate Appraisal ......................... 3
RE 163 Real Estate Practice .......................... 3
RE 164 Real Estate Finance .......................... 3
RE 165 Real Estate Economics ....................... 3
RE 166 Escrow Procedures .......................... 3
RE 167 Real Estate Property Management .......... 3

Total units required 9
RE-150 Real Estate Sales Training
1-3 units SC
Variable hours
Recommended: RE 160 (may be taken concurrently)
Based upon occupational analysis of the real estate salesperson's job. Emphasizes current case studies and practical problems.

RE-160 Real Estate Principles
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
An introductory course of entry into the real estate profession, for investing in real estate or for a better understanding of transfers of real property. The course covers real and personal property acquisition, ownership, estates in real property, contracts, deeds, financing, taxes, property transfer, agency and other essential topics. It will also assist persons preparing for the real estate salesperson's license examination, although it is not specifically or solely designed as a pre-licensing course. CSU

RE-161 Legal Aspects of Real Estate
3 units SC
54 hours lecture per term
Recommended: RE 160 or valid CA RE license or equivalent; eligibility for ENGL 122 or equivalent
Note: Applies toward CA Department of Real Estate educational requirements for real estate licenses.
A basic course in real estate valuation with emphasis on residential property. Definitions and concepts; principles of valuation; the appraisal process; analysis of city, neighborhood and site data; architectural styles and utility, depreciation; valuation by market data, cost and income approaches; correlation of approaches and final estimate of value; the appraisal report; and the professional appraiser.

RE-162 Real Estate Appraisal
3 units SC
54 hours lecture per term
Recommended: RE 160 or valid California real estate license; eligibility for ENGL 122
Note: Applies toward the state educational requirements for broker's license examination.
Basic principles and influences on valuation; techniques of valuation, including the appraisal process; site analysis and depreciation; cost, market, data, and income approaches. Case studies illustrating the techniques and principles. Field work, single-family residential from appraisal report. CSU

RE-163 Real Estate Practice
3 units SC
54 hours lecture per term
Recommended: valid real estate license or RE 160; eligibility for ENGL 122
Note: Applies toward the state educational requirements for the broker's license.
A comprehensive presentation of techniques of prospecting, listing, selling, financing, purchase agreements, escrow, exchange, and property management. Subjects are covered primarily on a practical basis and include working knowledge of the practices necessary to be effective in the real estate industry. CSU

RE-164 Real Estate Finance
3 units SC
54 hours lecture per term
Recommended: RE 160 or valid CA RE license or equivalent; eligibility for ENGL 122 or equivalent
Note: Applies toward the state educational requirements for the sales or broker's license.
Overviews the real estate residential finance system including institutions, mortgage loan products, and strategies for financing the purchase of owner occupied and investment property. CSU

RE-165 Real Estate Economics
3 units SC
54 hours lecture per term
Recommended: RE 160 or valid CA RE license or equivalent
Note: Serves to satisfy the license requirements for real estate sales and brokers and also the continuing education requirements of appraisers.
Applying economic concepts and theories to enhance the understanding of the functioning of real estate markets. Special attention to the role of government and other economic sectors in the observed value and returns on residential and commercial real estate will be observed. CSU

RE-166 Escrow Procedures
3 units SC
54 hours lecture per term
Recommended: RE 160 or valid CA RE license or equivalent; eligibility for ENGL 122 or equivalent
Note: Applies toward the state educational requirements for sales and broker's license examination.
A study of the procedures required to complete a valid escrow in order to close a real estate transaction. Emphasis placed on technical skills, legal aspects, ethical restrictions, interfacing with financing and real estate agents. CSU

RE-167 Real Estate Property Management
3 units SC
54 hours lecture per term
Recommended: RE 160 or valid CA RE license or equivalent; eligibility for ENGL 122
Note: Applies toward the continuing education requirement for sales and broker's license.
Primarily information on managing residential and apartment properties. However, does include commercial and business properties. Course includes relevant topics in acquisition, financing, maintenance, taxes, insurance, furnishings, and tenant relations. CSU
RE-201  Topics in Real Estate

.5-3 units  SC
May be repeated three times
Variable hours
A supplemental course in real estate designed to provide a study of current real estate problems or activities. Specific topics to be announced. CSU

RE-262  Real Estate Appraisal II

3 units  SC
54 hours lecture per term
Recommended: RE 160 and RE 162 or valid CA RE license or equivalent
Note: applies toward the broker’s license requirements and the continuing education of appraisers, sales and broker’s licenses.
A careful study of the narrative appraisal report, the different approaches to appraisal including the market data approach, cost approach, gross income estimate, capitalization rates, building residual techniques, as used in the appraisal of commercial real estate. Advanced study in appraisal and valuation techniques with emphasis on income, commercial, and industrial properties. Prepare case testimony for governmental agencies. CSU

CARDV-120  Careers in Administration of Justice and Law

1 unit  SC
May be repeated once
18 hours lecture per term
An exploration of careers in administration of justice, law and related fields. Emphasis is focused on job search techniques and career decision making. Students will investigate specific Administration of Justice and law careers, become acquainted with related programs, analyze existing job market opportunities and conduct a self-assessment of interests, skills and abilities. Work attitudes and values will be clarified. CSU

CARDV-130  Careers in Social Service

1-3 units  SC
May be repeated once
Variable hours
An exploration of careers in Social Service and related fields. Emphasis is focused on job search techniques and career decision making. Students will investigate specific Social Service and/or Human Service careers, become acquainted with related programs, analyze existing job market opportunities and conduct a self-assessment of interests, skills and abilities. Work attitudes and values will be clarified. CSU

CARDV-140  Careers in Health Education

1 unit  SC
May be repeated once
18 hours lecture per term
An exploration of careers in Health Services and related fields. Emphasis is focused on job search techniques and career decision making. Students will investigate specific health careers, become acquainted with related programs, analyze existing job market opportunities and conduct a self-assessment of interests, skills and abilities. Work attitudes and values will be clarified. CSU

CARDV-150  Exploring Careers

1 unit  SC
May be repeated three times
18 hours lecture per term
An exploration of current job market conditions, emphasizing the job search process and career decision-making. Major activities include allowing students to explore through research, various career fields, using library skills, guest speakers, EUREKA computer system, resume writing, interviewing skills and personal assessment devices. CSU

CARDV-155  Career Development Seminar

1 unit  SC
May be repeated once
18 hours lecture per term
Investigation of career-related topics in business and industry as well as other sectors of the employment community. Employment trends, work attitudes and values, job-search techniques, interpersonal work relationships, legal issues in the work place, advancement on the job, career change and mobility are some of the topics that may be explored. CSU
Chemistry – CHEM

Possible career opportunities
Chemists identify and solve problems by applying logic, scientific thinking, and knowledge of natural laws. Chemistry majors work in educational settings and in government, nonprofit charities, or research foundations. Chemists work in manufacturing companies, cosmetic companies, environmental assessment firms, medical laboratories, petroleum companies and pharmaceutical companies. They also can become health administrators, and physicians (all specialties). Many careers require more than two years of college study.

CHEM-106 Practical Everyday Chemistry
4 units SC
72 hours lecture / 36 hours laboratory per term
Prerequisite: MATH 110 or one year of high school algebra or appropriate placement through the assessment process. 
Recommended: eligibility for ENGL 122 or equivalent
Note: this is not a preparatory course for other chemistry courses.
This course places chemistry concepts in a practical context, using qualitative and quantitative examples that are encountered in everyday life. The course is designed to develop scientific literacy for non-science majors. Laboratory exercises include hands-on-experiments related to concepts covered in lecture. CSU, UC (credit limits may apply to UC - see counselor)

CHEM-108 Introductory Chemistry
4 units SC
72 hours lecture / 36 hours laboratory per term
Prerequisite: MATH 110 or one year of high school algebra or appropriate placement through the assessment process 
Recommended: eligibility for ENGL 122 or equivalent
This course is an introduction to the experimental science of chemistry. Using mathematical word problems and chemical terms, the student will have an overview of inorganic chemistry that could be used to continue to General Chemistry or to complete the sequence of chemistry courses designed for nursing and dental hygiene (with CHEM 109). This course is appropriate for those that have no high school chemistry experience. CAN CHEM 6, CHEM 108+109 = CAN CHEM SEQ B, CSU, UC (credit limits may apply to UC - see counselor)

CHEM-109 Introduction to Organic and Biochemistry
4 units SC
72 hours lecture / 36 hours laboratory per term
Prerequisite: CHEM 108 or high school chemistry or equivalent
CHEM 109 provides a focused introduction to the chemistry of living things. Organic Chemistry (the study of carbon com- pounds) is linked to biochemistry (the chemical basis of life) through the relationship of molecular structure and function. The CHEM 108 and 109 sequence is designed to meet the needs of programs such as dental hygiene and nursing. CAN CHEM 8, CHEM 108+109 = CAN CHEM SEQ B, CSU, UC (credit limits may apply to UC - see counselor)

CHEM-119 Chemistry 120 Supplemental Workshop
1 unit CR/NC
36 hours lecture / 18 hours laboratory by arrangement per term
Prerequisite: concurrent enrollment in CHEM 120
This course is intended to enhance students' abilities to achieve their full potential in CHEM 120. Selected subject matter from CHEM 120 will be examined in the context of activities intended to solidify concepts and expand such skills as problem solving, learning how to learn chemistry, using resources, and working as a team. Activities will be predominantly collaborative. CSU

CHEM-120 General College Chemistry
5 units LR
90 hours lecture / 72 hours laboratory per term
Prerequisite: CHEM 108 or appropriate chemistry skill level demonstrated through Chemistry Diagnostic Test or equivalent MATH 120 or appropriate placement through the math assessment process or equivalent
Recommended: eligibility for ENGL 122 or equivalent
Note: calculator used in this course
An introduction to the fundamentals of chemistry including such topics as atomic theory, bonding, structure, stoichiometry, gases, solutions, redox, thermochemistry, equilibrium, and acid-base chemistry. CAN CHEM 2, CHEM 120+121 = CAN CHEM SEQ A, CSU, UC

CHEM-121 General College Chemistry II
5 units LR
90 hours lecture / 72 hours laboratory per term
Prerequisite: CHEM 120 or equivalent
This course is a continuation of CHEM 120, General College Chemistry. Subject matter includes: solubility product, qualitative analysis, thermodynamics, electrochemistry, kinetics, bonding and molecular structures, coordination complexes, nuclear chemistry, organic chemistry, and basic spectroscopy. CAN CHEM 4 CHEM 120+121 = CAN CHEM SEQ A, CSU, UC

CHEM-150 Topics in Chemistry
.3-.4 units SC
Variable hours
A supplemental course in chemistry to provide a study of current concepts and problems in Chemistry. Specific topics will be announced in the schedule of courses. CSU
CHEM-226 General Organic Chemistry
5 units LR
90 hours lecture / 72 hours laboratory per term
Prerequisite: CHEM 120 and 121 or equivalent
This half of a one-year course (226-227) covers structure and bonding, stereo chemistry, conformational analysis, reaction mechanisms, and the nomenclature, physical properties, and reactions of various classes of organic compounds (alkanes, alkenes, alkynes, aromatics, alkyl halides, alcohols, and ethers). Basic organic laboratory techniques are introduced and used in synthesis or other projects. CSU, UC

CHEM-227 General Organic Chemistry
5 units LR
90 hours lecture / 72 hours laboratory per term
Prerequisite: CHEM 120 and 121 or equivalent; CHEM 226 or equivalent
A continuation of CHEM 226. This half of the course covers spectroscopy, additional reaction mechanisms, the nomenclature, physical properties, and reactions of other basic classes of compounds (organometallics, aldehydes, ketones, carboxylic acids and their derivatives, and amines), the nature and reactions of multifunctional compounds, and the structure and reactions of biochemical molecules (carbohydrates, lipids, amino acids, and proteins). Laboratory work includes spectroscopy (NMR, IR), qualitative organic analysis, and more advanced projects involving synthesis and library research. CSU, UC

CHEM-298 Independent Study
.5-3 units SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered
An opportunity for advanced students to pursue special interests under the direction of the faculty. CSU, UC (credit limits may apply to UC - see counselor)

Chinese – CHIN

Foreign Service, tourism, library services, teaching, professional translating, journalism, and all levels of education, including university teaching. Most foreign language careers require more than two years of study.

Certificate of completion - Mandarin Chinese
This certificate prepares students with an intermediate to advanced knowledge of Mandarin Chinese and will familiarize them with the culture of China.

To earn a certificate of completion, students must complete each course used to meet a certificate requirement with a “C” grade or better.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHIN 120</td>
<td>5</td>
<td>First Term Mandarin Chinese</td>
</tr>
<tr>
<td>CHIN 121</td>
<td>5</td>
<td>Second Term Mandarin Chinese</td>
</tr>
<tr>
<td>CHIN 220</td>
<td>5</td>
<td>Third Term Mandarin Chinese</td>
</tr>
<tr>
<td>CHIN 221</td>
<td>5</td>
<td>Fourth Term Mandarin Chinese</td>
</tr>
</tbody>
</table>

Total units required 15

CHIN-120 First-Term Mandarin Chinese
5 units SC
90 hours lecture / 18 hours laboratory by arrangement per term
This beginning Chinese course emphasizes pronunciation drill, sentence pattern analysis and development of language skills in listening, speaking, reading, and writing. Character reading and writing are introduced. Cultural material and information are used extensively in this course. CAN CHIN 2, CAN CHIN 120 + 121 = CAN CHIN SEQ A, CSU, UC

CHIN-121 Second-Term Mandarin Chinese
5 units SC
90 hours lecture / 18 hours laboratory by arrangement per term
Recommended: CHIN 120 or equivalent
This course is a continuation of CHIN 120. Further acquisition of language skills in listening, speaking, reading, and writing will be emphasized. Students will gain proficiency in understanding and speaking Mandarin in everyday situations. CAN CHIN 4, CHIN 120 and 121 = CAN CHIN SEQ A, CSU, UC

CHIN-150 Topics in Chinese
.3-4 units SC
May be repeated three times
Variable hours
A supplemental course in Chinese to provide a study of current concepts and problems in Chinese and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

Applied and Fine Arts Division
Dean of Applied and Fine Arts
Humanities Building 112 and 113
925-685-1230 x 2312

Possible career opportunities
The study of Chinese can open up opportunities in communications, foreign trade and banking, transportation, government, the
CHIN-220  Third-Term Mandarin Chinese
5 units  SC
90 hours lecture / 18 hours laboratory by arrangement per term
Recommended: CHIN 121 or equivalent
This course is the continuation of CHIN 121 with a review of grammar and further development of reading and writing skills in Mandarin. Passages from Chinese literature and reading on Chinese culture will be studied. CAN CHIN 8, CHIN 220 and 221 = CAN CHIN SEQ B, CSU, UC

CHIN-221  Fourth -Term Mandarin Chinese
5 units  SC
90 hours lecture / 18 hours laboratory by arrangement per term
Recommended: CHIN 220 or equivalent
This course is the continuation of CHIN 220 with a review of grammar and further development of reading and writing skills in Mandarin. Passages from Chinese literature and reading of Chinese culture will be studied. CAN CHIN 10, CHIN 220 + 221 = CAN CHIN SEQ B, CSU, UC

CHIN-298  Independent Study
.5-3 units  SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department and office of instruction; topics must extend study beyond courses offered
Selected students may pursue special studies in Chinese under the guidance of the foreign language faculty. CSU, UC (credit limits may apply to UC - see counselor)

Colloquia – COLQY

Social Sciences Division
Lyn Krause, Dean
Faculty Office 134
925-685-1230 x 2518

COLQY-120  Colloquia
.5-3 units  SC
May be repeated three times
Variable hours
A colloquium is a discussion group of students who meet with an instructor over the period of a term to consider ideas of continuing importance or a basic document of enduring significance. The purpose is to stimulate serious thought through discussion and analysis. The schedule of courses and student transcript will indicate the general subject matter of each colloquium offered. CSU, UC (credit limits may apply to UC - see counselor)

Computer information systems – CIS

San Ramon Valley Center Division
Cheryll LeMay, Dean
San Ramon Valley Center
925-866-1822 x 5103

CIS-050  Topics in Current Operating Systems
.3-4 units  SC
May be repeated twice
Not degree applicable
Variable hours
A supplemental course in CIS to provide a study and application of current techniques in computer operating systems. Specific topics will be announced in the schedule of courses.

CIS-051  Topics in Word Processing Applications
.3-4 units  SC
May be repeated three times
Not degree applicable
Variable hours
A supplemental course in CIS to provide a study and application of current techniques in word processing applications. Specific topics will be announced in the schedule of courses.

CIS-052  Topics in Spreadsheets and Financial Applications
.3-4 units  SC
May be repeated three times
Not degree applicable
Variable hours
A supplemental course in CIS to provide a study and application of current techniques in spreadsheets and financial applications. Specific topics will be announced in the schedule of courses.

CIS-053  Topics in Graphics and Presentation Applications
.3-4 units  SC
May be repeated three times
Not degree applicable
Variable hours
A supplemental course in CIS to provide a study and application of current techniques in graphics and presentation applications. Specific topics will be announced in the schedule of courses.

CIS-054  Topics in Database Applications
.3-4 units  SC
May be repeated three times
Not degree applicable
Variable hours
A supplemental course in CIS to provide a study and application of current techniques in database applications. Specific topics will be announced in the schedule of courses.
CIS-055  Topics in Internet and Web Design
.3-4 units  SC
May be repeated three times
Not degree applicable
Variable hours
A supplemental course in CIS to provide a study and application of current techniques in Internet and web design. Specific topics will be announced in the schedule of courses.

CIS-099  Special Topics in Software Applications
.75-4 units  SC
May be repeated three times
Not degree applicable
Variable hours
A supplemental course in CIS to provide a study of current concepts and techniques in computer software applications. Specific topics will be announced in the schedule of courses.

Computer network technology – CNT

These CNT courses prepare students for a career path in computer network technologies. These courses teach terminology, and provide hands-on laboratory experience with operating systems and network devices. These courses begin to prepare the student for popular vendor certifications such as MCSE, MCSA, MSDBA, CCNA, CCNP, CCDA, CCDP, and copper/fiber cabling to name a few.

Possible career opportunities
The job titles of people employed in computer networking include: systems administrator, network administrator, network engineer, database administrator, LAN specialist and network designer.

Associate in science degrees
Microsoft Windows system administration

Certificate of achievement
Microsoft Windows system administration

Associate in science degree - Microsoft Windows systems administration
The associate degree in computer networking - Microsoft Windows systems administration prepares a student for a career in Information Technology while enabling the student to earn an associate in science degree. The degree offers students a broad general education while integrating an in-depth study of network-

Certificate of achievement - Microsoft Windows systems administration
The Microsoft Windows systems administration program is designed to fully prepare students to install, configure and administer Microsoft products. The program focuses on Microsoft, but also includes support courses that are not vendor specific and better prepare the student to work in the field. Completion of the program helps to prepare students to take and pass the Microsoft series of certification exams. You will need to complete a separate testing process administered by Microsoft that generally requires payment of fees to receive the certification as a Microsoft Certified Systems Engineer (MCSE).

This curriculum provides preparation for a career in computer systems administration. These jobs go by a variety of titles such as: systems administrator, network administrator, network engineer, database administrator and LAN specialist. This program would be an excellent choice for a student interested in a career with any of those job titles. To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better and maintain an overall GPA of 2.5 or better in the coursework required for the certificate.
## Computer network technology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNT 105</td>
<td>Computer Networking Hardware/Software</td>
<td>3</td>
<td>Required course</td>
</tr>
<tr>
<td>CNT 114</td>
<td>Microsoft Windows Operating System Essentials/Administration</td>
<td>3</td>
<td>Required course</td>
</tr>
<tr>
<td>CNT 117</td>
<td>Implementing Microsoft Windows Directory Services</td>
<td>3</td>
<td>Required course</td>
</tr>
<tr>
<td>CNT 118</td>
<td>Implementing a Microsoft Windows Network Infrastructure</td>
<td>3</td>
<td>Required course</td>
</tr>
<tr>
<td>COMTC 110B</td>
<td>Introduction to Computer Hardware/Software</td>
<td>4</td>
<td>Recommended: CNT 116 or equivalent</td>
</tr>
<tr>
<td>COMTC 118</td>
<td>Introduction to Operating Systems</td>
<td>4</td>
<td>Required course</td>
</tr>
<tr>
<td></td>
<td><strong>Total required units</strong></td>
<td><strong>32</strong></td>
<td></td>
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</table>

### Plus at least 6 units from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>CNT 131</td>
<td>Administering a Microsoft SQL Database</td>
<td>3</td>
<td>Required course</td>
</tr>
<tr>
<td>CNT 134</td>
<td>Microsoft Internet Security and Acceleration (ISA) Server</td>
<td>3</td>
<td>Required course</td>
</tr>
<tr>
<td>CNT 138</td>
<td>Implementing and Managing Microsoft Exchange Server</td>
<td>3</td>
<td>Required course</td>
</tr>
</tbody>
</table>

### CNT 103 Voice, Video and Network Cabling

1 unit LR  
May be repeated once  
18 hours lecture / 36 hours laboratory per term  
This course is designed to provide students with job entry skills to install and terminate voice, video and networking cable to industry standards. Students will work with copper and fiber-optic cable. CSU

### CNT 105 Computer Networking Hardware/Software

3 units SC  
54 hours lecture per term  
This course is a foundation course that provides an overview of computer networking components. It provides the student with the concepts needed to work in a networking environment. This course explains and describes how computer networks are used, designed, installed, and the terminology associated with computer networks. This course begins to prepare students for the CompTIA Network+ exam and is the introduction course for the Microsoft, Cisco, and computer Technician programs. CSU

### CNT 114 Microsoft Windows Operating System Essentials/Administration

3 units SC  
May be repeated when software version and network technologies are upgraded.  
45 hours lecture / 27 hours laboratory per term  
Recommended: CNT 105 or equivalent  
This course provides students with the knowledge and skills necessary to perform administrative tasks in a single-domain Microsoft Windows network. The goal of this course is to provide individuals who are new to Microsoft Windows operating system with the knowledge necessary to understand and identify the tasks involved in supporting Windows networks. This is an introductory course designed to provide knowledge of user accounts, groups and group scopes, permissions, security, Active Directory terminology, optimizing IP address allocation, utilities, and Web Services. CSU

### CNT-116 Implementing Microsoft Windows Professional and Server

3 units LR  
May be repeated once when software version and networking technologies are upgraded.  
45 hours lecture / 27 hours laboratory per term  
Recommended: CNT 116 or equivalent  
Students will learn to install and configure Microsoft Windows Professional on stand-alone computers and on client computers that are part of a workgroup or a domain. In addition, this course provides the skills and knowledge necessary to install and configure Windows Server and to create file, print, and Terminal Servers. Students will administer an organizational unit within a single domain structure. CSU

### CNT-117 Implementing Microsoft Windows Directory Services

3 units LR  
May be repeated once when software version and networking technologies are upgraded.  
45 hours lecture / 27 hours laboratory per term  
Recommended: CNT 116 or equivalent  
Students will learn to install, configure, and administer Microsoft Windows Active Directory directory services. The course also focuses on implementing Group Policy and understanding the Group Policy tasks required to centrally manage users and computers. Students will use Group Policies to configure and manage the user desktop environment, to configure and manage software, and implement and manage security settings. Students will install and manage Windows Domains and Domain Controllers through Active Directory. CSU

### CNT-118 Implementing a Microsoft Windows Network Infrastructure

3 units LR  
May be repeated once when software version and networking technologies are upgraded.  
45 hours lecture / 27 hours laboratory per term  
Recommended: CNT 116 or equivalent  
This course will enable students to install, configure, manage and support a network infrastructure that uses the Microsoft Windows Server products. The course focuses heavily on TCP/IP and related services, including DHCP Server service, DNS Server service, WINS, network security protocols, Public Key Infrastructure (PKI), Internet Protocol Security (IPSec), and remote access. The course also enables the student to configure Windows as a network router, configure Internet access for a network, configure a Web server, and manage a Windows deployment using Remote Installation Services (RIS). CSU
CNT-131 Administering a Microsoft SQL Server Database
3 units LR
May be repeated once when software version and networking technologies are upgraded.
45 hours lecture / 27 hours laboratory per term
Recommended: CNT 116 or equivalent
This course provides students with the knowledge and skills required to install, configure, administer, and troubleshoot a Microsoft SQL Server client/server database management system. CSU

CNT-134 Microsoft Internet Security and Acceleration (ISA) Server
3 units LR
May be repeated once when software version and networking technologies are upgraded.
45 hours lecture / 27 hours laboratory per term
Recommended: CNT 118 or equivalent
This course provides Information Technology (IT) professionals with the knowledge and skills to deploy and manage Microsoft Internet Security and Acceleration (ISA) Server in an enterprise environment. Laboratory exercises allow hands-on implementation of methods taught in class. CSU

CNT-135 Programming a Microsoft SQL Server Database
3 units LR
May be repeated once when software version and networking technologies are upgraded.
45 hours lecture / 27 hours laboratory per term
Recommended: CNT 116 or equivalent
This course provides students with the technical skills required to implement a database solution with the Microsoft SQL Server Client/Server database management system based on a case-study design. Laboratory exercises allow hands-on implementation of the case study design. CSU

CNT-138 Implementing and Managing Microsoft Exchange Server
3 units LR
May be repeated once when software version and networking technologies are upgraded.
45 hours lecture / 27 hours laboratory per term
Recommended: CNT 116 or equivalent
This course provides students with in-depth product information on the following topics: Planning deployment and installing Exchange Server, architecture of Exchange Server, supporting Exchange Server in a single site or multi-site enterprise environment, establishing messaging connectivity over the Internet, and supporting Web access to Exchange Server computers through Microsoft Outlook Web Access. CSU

CNT-150 Topics in Computer Networking
.3-4 units SC
May be repeated three times
Variable hours
Recommended: TBA
A supplemental course in Computer Networking Technology designed to provide a study of the current developments in the field and related subdivisions. Specific topics to be announced. CSU

CNT-161 Cisco Router Configuration and Routing
2 units LR
27 hours lecture / 27 hours laboratory per term
Prerequisite: CNT 160
Note: equivalent to CCNA II
This is the second of four courses designed to introduce students to router configuration and implementation. Instruction includes safety, route commands, router bootup process, router backup and restore process, TCP/IP addressing implementation, dynamic routing, routing, and the administrator's role and function. This course is preparation for the Cisco Certified Networking Associate (CCNA) certification. CSU

CNT-223 Designing a Secure Microsoft Windows Network
3 units LR
May be repeated once when software and networking technologies are upgraded.
45 hours lecture / 27 hours laboratory per term
Recommended: CNT 117 or equivalent
This course provides students with the knowledge and skills necessary to design a security framework for small, medium and enterprise networks using Microsoft Windows technologies. Students will learn to provide secure access to local network users, to remote users and remote offices, between private and public networks, and to partners. Group Policy, site topology, Virtual Private Networks (VPNs), e-commerce, printer security, and security for non-Microsoft clients are also taught in the course. CSU

Computer science – COMSC

The computer science department offers courses in three general areas, each targeted to serve students with specific needs:

a. General education students seeking a Computer Literacy course which will transfer to both CSU and UC campuses and/or provide hands-on instruction in the use of personal computer for classroom and research needs (COMSC 100, 100L, 90 and 75)

b. Computer science transfer students planning to major in Computer Science or computer engineering at a four-year school (COMSC 105, 110, 210, 260 and 265)
c. Information systems (programming) professionals who are seeking to update their skills, (COMSC 95, 171, 172, 255, 265, 266 and 267)

Math and Computer Science Division
Rachel Westlake, Dean
Math Building 267
925-685-1230 x 2609

Possible career opportunities
Study in computer science prepares students for careers in programming, computer operations, systems analysis and engineering, and web design, as well as artificial intelligence, robotics, and software engineering and development. Some career options may require more than two years of college study.

Besides offering courses designed to meet lower-division requirements for a major in computer science, there is also a wide variety of courses covering current popular topics and new software development tools and languages. Such courses provide a path for working professionals to upgrade their skill-set and keep abreast with current technology.

Associate in science degree
Computer science

Certificates of achievement
Computer and information science
Microcomputer software support

Associate in science degree – Computer science
The associate in science in computer science is designed as a two-year curricular pathway that offers students a broad general education while integrating an in-depth study of computer science. Students will be prepared to assume entry-level positions in business and industry. Many of the courses are also applicable toward advanced levels of study. Students who intend to transfer to a four-year program in computer science should consult with a counselor regarding other mathematics and science requirements. To earn a degree, students must complete each course used to meet a major requirement with a “C” grade or better. Certain courses may satisfy both a major and a DVC General Education requirement; however the units are only counted once.

<table>
<thead>
<tr>
<th>Required courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSC 110</td>
<td>Introduction to Programming</td>
</tr>
<tr>
<td>COMSC 210</td>
<td>Introduction to Programming</td>
</tr>
<tr>
<td>COMSC 260</td>
<td>Assembly Language Programming/Computer Organization</td>
</tr>
</tbody>
</table>

General education requirements 27-38

in addition, the student must complete either

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSC 265</td>
<td>Advanced Programming with C/C++</td>
</tr>
<tr>
<td>COMSC 266</td>
<td>Object Oriented Programming with C++</td>
</tr>
</tbody>
</table>

or

<table>
<thead>
<tr>
<th>Electives</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSC 255</td>
<td>Programming with Java</td>
</tr>
<tr>
<td>COMSC 256</td>
<td>Advanced Program Design and Data Structures</td>
</tr>
</tbody>
</table>

Total units for the major 20

Electives

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAC 186</td>
<td>Principles of Accounting</td>
</tr>
<tr>
<td>COMSC 110</td>
<td>Introduction to Programming</td>
</tr>
<tr>
<td>COMSC 210</td>
<td>Program Design and Data Structures</td>
</tr>
<tr>
<td>COMSC 260</td>
<td>Assembly Language Programming/Computer Organization</td>
</tr>
</tbody>
</table>

Total units for the degree 60

Certificate of achievement - computer and information science
This program prepares students for a variety of programming or information systems positions and is especially suitable for students who have four-year degrees.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better.* Certificate requirements may only be completed by attending a combination of day and evening classes.

*Up to 15.5 units may be CR

Required courses

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 240</td>
<td>Business Statistics</td>
</tr>
<tr>
<td>MATH 142</td>
<td>Elementary Statistics and Probability</td>
</tr>
</tbody>
</table>

Plus at least 3 units from:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 250</td>
<td>Business Communications</td>
</tr>
<tr>
<td>CNT 105</td>
<td>Computer Networking Hardware/Software</td>
</tr>
<tr>
<td>CNT 114</td>
<td>Microsoft Windows Operating System Essentials/Administration</td>
</tr>
<tr>
<td>COMSC 95</td>
<td>WWW Publishing with HTML</td>
</tr>
<tr>
<td>COMSC 96</td>
<td>Advanced WWW Publishing</td>
</tr>
<tr>
<td>COMSC 97</td>
<td>Advanced HTML - Style Sheets and DHTML</td>
</tr>
<tr>
<td>COMSC 171</td>
<td>Introduction to UNIX</td>
</tr>
<tr>
<td>COMSC 245</td>
<td>Programming with Visual Basic.NET</td>
</tr>
<tr>
<td>COMSC 255</td>
<td>Programming with Java</td>
</tr>
<tr>
<td>COMSC 256</td>
<td>Advanced Java Programming</td>
</tr>
<tr>
<td>COMSC 265</td>
<td>Advanced Programming with C/C++</td>
</tr>
<tr>
<td>COMSC 266</td>
<td>Object Oriented Programming with C++</td>
</tr>
<tr>
<td>COMSC 267</td>
<td>Windows Programming with C#</td>
</tr>
</tbody>
</table>

Total units required 33.5-35
Certificate of achievement - Microcomputer software support

This program gives students the skills in computer programming, personal productivity applications, and data communications that they will need to succeed as a software support specialist in a typical office environment where administrative and financial management are supported by personal computers. To be successful the individual must have an understanding of the capabilities and limitations of microcomputers, be able to recommend personal productivity solutions to management, purchase and install stand alone and networked microcomputers and software, write instructions for using applications, and provide training on new systems.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a "C" grade or better.* Certificate requirements may only be completed by attending a combination of day and evening classes.

*Up to 11 units may be CR

required courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAC 186</td>
<td>Principles of Accounting I</td>
</tr>
<tr>
<td>BUS 250</td>
<td>Business Communications I</td>
</tr>
<tr>
<td>COMSC 100</td>
<td>Introduction to Computers and Information Systems</td>
</tr>
<tr>
<td>COMSC 100L</td>
<td>Introduction to Computer Software</td>
</tr>
<tr>
<td>COMSC 110</td>
<td>Introduction to Programming</td>
</tr>
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</table>

plus at least 12 units from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAC 185</td>
<td>Computer Accounting for Business I</td>
</tr>
<tr>
<td>CNT 105</td>
<td>Computer Networking Hardware/Software</td>
</tr>
<tr>
<td>CNT 114</td>
<td>Microsoft Windows Operating System Essentials/Administration</td>
</tr>
<tr>
<td>COMSC 95</td>
<td>WWW Publishing with HTML</td>
</tr>
<tr>
<td>COMSC 96</td>
<td>Advanced WWW Publishing</td>
</tr>
<tr>
<td>COMSC 97</td>
<td>Advanced HTML - Style Sheets and DHTML</td>
</tr>
<tr>
<td>COMSC 150**</td>
<td>Topics in Computer Science</td>
</tr>
<tr>
<td>COMSC 151**</td>
<td>Topics in Operating Systems</td>
</tr>
<tr>
<td>COMSC 152**</td>
<td>Topics in Application Software</td>
</tr>
<tr>
<td>COMSC 154*</td>
<td>Topics in Programming Languages</td>
</tr>
<tr>
<td>COMSC 155**</td>
<td>Topics in Networking</td>
</tr>
<tr>
<td>COMSC 171</td>
<td>Introduction to UNIX</td>
</tr>
<tr>
<td>COMSC 245</td>
<td>Programming with Visual Basic</td>
</tr>
<tr>
<td>COMSC 255</td>
<td>Programming with Java</td>
</tr>
<tr>
<td>COMSC 265</td>
<td>Advanced Programming with C/C++</td>
</tr>
</tbody>
</table>

Total units required 26

** Up to 4 units total may be from COMSC 150, COMSC 151, COMSC 152, COMSC 154, and COMSC 155.

COMSC-095 WWW Publishing with HTML

1 unit CR/NC
May be repeated once
Not degree applicable
18 hours lecture / 9 hours laboratory per term

Learn to publish World Wide Web (WWW) pages using Hypertext Markup Language (HTML). Create your own web page and study how to create attractive and functional documents using text and graphics.

COMSC-096 Advanced WWW Publishing

1 unit CR/NC
May be repeated once
Not degree applicable
18 hours lecture / 9 hours laboratory per term
Recommended: COMSC 095 or equivalent

This is an advanced WWW Publishing course which builds on the skills learned in COMSC 095 and provides further hands-on development of WWW documents and related topics. Software used will depend on the evolutionary state of the various WWW Publishing languages, and will be announced in the current schedule of courses.

COMSC-097 Advanced HTML - Style Sheets and DHTML

1 unit CR/NC
18 hours lecture / 9 hours laboratory per term
Recommended: COMSC 095 or equivalent

This course will cover the use of “Style Sheets” to create formatting templates for a website and to precisely control the position and appearance of items on each web page. It will also cover DHTML techniques for creating animations. This class will open opportunities for students who want to be more involved in web page programming.

COMSC-100 Introduction to Computers and Information Systems

3 units SC
54 hours lecture / 18 hours laboratory per term
Prerequisite/co-requisite: concurrent enrollment in COMSC 100L

A beginning course designed to acquaint the student with the general concepts and basic vocabulary of computers and information systems. Includes introduction to the organization and functions of basic components of computers, and information processing systems. Instruction in programming procedures and programming logic is provided. Appropriate for the student with a general interest in this area as well as for the student desiring to pursue further training in computer science or information systems. CAN CAN BUS 6 CAN CSCI 2, CSU, UC (credit limits may apply to UC - see counselor)

COMSC-100L Introduction to Computer Software

1 unit SC
54 hours laboratory per term
Recommended: Concurrent enrollment in COMSC 100

The student will learn to use several personal computer applications such as a graphic operating system user interface, a
spreadsheet program, a database program, a presentation program, and a word processing program. The hands-on computer work will augment the basic concepts covered in COMSC-100. CSU, UC (credit limits may apply to UC - see counselor)

**COMSC-102 Introduction to Programming Logic**  
(Self-Paced)  
.6 unit SC  
May be repeated once  
36 hours laboratory per term  
Note: may be taken concurrently with an introductory programming course  
A self-paced, language independent course in the basic logic and problem solving skills necessary for success in computer programming. CSU

**COMSC-105 Introduction to Computer Science**  
3.5 units SC  
54 hours lecture / 27 hours laboratory per term  
Note: this is the preferred introductory course for computer science majors  
A beginning course for computer science majors. Basic hardware and software terminologies are covered. Students are introduced to program design and development methodologies, data representation, data structures, operating systems, and machine architecture. CSU, UC (credit limits may apply to UC - see counselor)

**COMSC-110 Introduction to Programming**  
4 units SC  
54 hours lecture / 54 hours laboratory per term  
Recommended: COMSC 100 or equivalent OR COMSC 105 or equivalent  
Introduction to programming emphasizing modular design and development of programs, coding style, documentation, debugging, and testing. All control structures and data types of a commonly-used language are covered. CSU, UC

**COMSC-120 SQL and Oracle PL/SQL Programming**  
4 units SC  
54 hours lecture / 54 hours laboratory per term  
Recommended: COMSC 110 or equivalent  
Note: refer to course schedule for specific Oracle version  
This course covers the creation and maintenance of database objects. It also covers the storage, retrieval and manipulation of data. Programming will be done in Oracle PL/SQL. CSU

**COMSC-138 Using Visual Basic for Applications**  
2 units SC  
27 hours lecture / 27 hours laboratory per term  
Recommended: COMSC 100 or equivalent, COMSC 100L or equivalent  
This course will teach the student to use Visual Basic for Applications (VBA) in all of the products of the Microsoft Office Suite, including Word, Excel, PowerPoint and Access. Topics covered will include the tools, properties, methods, objects, and language syntax of VBA. CSU

**COMSC-142 XML (eXtensible Markup Language)**  
2 units SC  
27 hours lecture / 27 hours laboratory per term  
Recommended: COMSC 115 or equivalent  
This course introduces eXtensible Markup Language (XML) Documents. Students will learn the difference between HTML and XML and learn how to use XML in Java applications. CSU

**COMSC-144 Active Server Pages (ASP)**  
2 units SC  
27 hours lecture / 27 hours laboratory per term  
Recommended: CIS 54A or equivalent, and CIS 55G or equivalent, and COMSC 110 or equivalent  
A course on creating dynamic web pages using Active Server Pages (ASP) covering server-side scripting, syntax, ASP objects, ActiveX Data Objects (ADO), application and session states, emailing from web pages, and connecting a database to web pages. CSU

**COMSC-146 Java Server Pages (JSP) and Servlets**  
2 units SC  
27 hours lecture / 27 hours laboratory per term  
Recommended: COMSC 115 or equivalent and COMSC 255 or equivalent  
This course introduces basic Java Servlet capabilities to create interactive web pages including secured access to web sites, database interactivity, generation of dynamic web pages, and maintaining client session data (cookies). CSU

**COMSC-150 Topics in Computer Science**  
3-4 units SC  
May be repeated three times  
Variable hours  
Prerequisite: TBA  
Recommended: TBA  
Note: may be repeated twice when software is changed  
A supplemental course in Computer Science to provide a study of current concepts and problems. Specific topics will be announced in the schedule of courses. CSU, UC (credit limits may apply to UC - see counselor)

**COMSC-151 Topics in Operating Systems**  
3-4 units SC  
May be repeated three times  
Variable hours  
A supplemental course in Operating Systems to provide a study of current concepts and problems in Operating Systems and related subdivisions. Specific topics will be announced in the schedule of courses. CSU, UC (credit limits may apply to UC - see counselor)
COMSC-152 Topics in Application Software
0.3-4 units SC
May be repeated three times
Variable hours
Prerequisite: TBA
Recommended: TBA
A supplemental course in Application Software to provide a study of current concepts and problems in Application Software and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

COMSC-154 Topics in Programming Languages
0.3-4 units SC
May be repeated three times
Variable hours
A supplemental course in Programming Languages to provide a study of current concepts and problems in Programming Languages and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

COMSC-155 Topics in Networking
0.3-4 units SC
May be repeated three times
Variable hours
A supplemental course in Networking to provide a study of current concepts and problems in Networking and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

COMSC-171 Introduction to UNIX
2 units SC
27 hours lecture / 27 hours laboratory per term
Recommended: COMSC 105 or equivalent
A beginning course to acquaint the student with the UNIX operating system. Topics include: terminals, shells, processes, permissions, utility programs, editors, TCP/IP configuration, network services, X window graphics, and installation. CSU, UC

COMSC-172 UNIX and Linux Installation and Local Administration
2 units SC
18 hours lecture / 54 hours laboratory per term
Recommended: COMSC 171 or equivalent
Note: course content will apply to all UNIX versions and Linux
This course is designed to prepare the student to install, maintain, and administer a UNIX or Linux system. Topics will include installation, booting, hardware configuration, kernel configuration, TCP/IP configuration, X window configuration, user management, backup, and security. CSU

COMSC-173 UNIX and Linux Scripting
2 units SC
27 hours lecture / 27 hours laboratory per term
Recommended: COMSC 171 or equivalent
This course covers programming using scripting languages on UNIX and Linux. Syntax of the Korn and bash shells, awk, and Tcl/Tk/expect will be covered. Scripting techniques will be covered, with application to system startup and configuration, text processing, graphic interfaces, and system administration. CSU

COMSC-174 UNIX and Linux Network Administration and Security
2 units SC
18 hours lecture / 54 hours laboratory per term
Recommended: COMSC 171 or equivalent
Note: course content will apply to all UNIX versions and Linux
This course is designed to prepare the student to install, maintain, and administer TCP/IP services on a UNIX or Linux system. Topics include BOOTP/DHCP, (dynamic addressing), routing, DNS (domain name system), (NFS network file system), anonymous FTP, (file transfer protocol), email, WWW, samba (services for Windows clients), SSH (secure shell), Kerberos (network authentication), and firewalls. CSU

COMSC-210 Program Design and Data Structures
4 units LR
54 hours lecture / 54 hours laboratory per term
Prerequisite: COMSC 255 or equivalent or COMSC 265 or equivalent
Techniques relevant to program design and selection of data structures for larger programs. Topics covered include design techniques, effective use of recursion, algorithmic efficiency and O-notation, linked lists, binary trees, B-trees, graphs, sorting, and searching techniques. Extensive programming of a variety of data structures is required. CAN CSCI 24, CSU, UC

COMSC-245 Programming with Visual Basic.NET
4 units SC
May be repeated once
54 hours lecture / 54 hours laboratory per term
Recommended: COMSC 110 or equivalent
Note: maybe repeated only when the software or language is changed
This course covers writing programs in the Microsoft Visual Basic programming language. Topics covered will include writing event-driven programs, designing context-sensitive Graphical User Interfaces (GUIs), and using structured exception-handling to manage runtime error. Programming with an object-oriented approach will be emphasized. CAN CSCI 6 CSU

COMSC-255 Programming With Java
4 units SC
54 hours lecture / 54 hours laboratory per term
Recommended: COMSC 110 or equivalent
This course emphasizes programming techniques using the Java programming language. The syntax and deployment of Java applications are reviewed. Advanced topics such as objects, classes, methods, OOP principles, GUI interfaces, I/O, data structures, applets, networking, and threads are covered. CSU, UC
COMSC-256 Advanced Java Programming
4 units SC
54 hours lecture / 54 hours laboratory per term
Recommended: COMSC 255 or equivalent
This course will cover advanced topics in Java programming including multithreading, exception handling, serialization, reflection, model view controller architecture, Java beans, servlets and database connectivity. CSU, UC

COMSC-257 Enterprise Java Programming
4 units SC
54 hours lecture / 54 hours laboratory per term
Recommended: COMSC 255 or equivalent
The course will comprise enterprise Java programming. It will cover the features of the Java 2 Enterprise Edition (J2EE). The topics presented will include Enterprise Java Beans, application servers, Remote Method Invocation, Servlets, Naming and Directory Services, Message and Web Services, Peer-To-Peer Services, and other facilities provided in J2EE. CSU

COMSC-258 Assembly Language Programming/Computer Organization
4 units SC
54 hours lecture / 54 hours laboratory per term
Prerequisite: COMSC 265 or equivalent
A course covering the basics of machine architecture, machine language, assembly language, operating system interface, and interfacing with high level languages. Topics include data representation, instruction representation and execution, addressing, indexing, macros, subroutine linkages, storage and time efficiency issues, interrupt handling, virtual memory, cache memory, and dynamic address translation. CAN CSCI 10, CSU, UC

COMSC-259 Advanced Programming With C and C++
4 units SC
54 hours lecture / 54 hours laboratory per term
Recommended: COMSC 110 or equivalent
The course emphasizes programming techniques using C and C++ languages. The syntax of C will be reviewed, then advanced topics such as string processing, pointers, links lists, queues, stacks, and dynamic memory allocation will be covered. CAN CSCI 18 + 32, CSU, UC

COMSC-260 Object Oriented Programming C++
4 units SC
54 hours lecture / 54 hours laboratory per term
Recommended: COMSC 256 or equivalent
This course provides detailed coverage of the concepts and syntax of the C++ Language. Coverage includes inheritance, overloaded operators, overloaded default operators, virtual functions, memory management files, streams, templates, and exceptions. CAN CSCI 18, CSU, UC

COMSC-267 Windows Programming With C#
4 units SC
May be repeated only when software or language is changed.
54 hours lecture / 54 hours laboratory per term
Recommended: COMSC 266 or equivalent or COMSC 256 or equivalent
Design and implement application programs specifically for the Microsoft Windows platform. The student will learn techniques for designing context-sensitive user interfaces, writing event-driven programs, defining classes to build libraries, and how to use the .NET Framework class library. CSU

COMSC-298 Independent Study
5-3 units SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond current course offerings
An opportunity for advanced students to study special interests under the direction of the faculty. CSU, UC (credit limits may apply to UC - see counselor)

Computer technical support – COMTC

Physical Science and Engineering Division
Dennis Smith, Dean
Physical Science Building 261
925-685-1230 x 2359

Possible career opportunities
The field of computer technical support includes jobs related to computer assembly, computer upgrading, computer servicing, and computer networking including wireless systems. In the industrial area job opportunities include computer controls and data acquisition. Job opportunities are good for individuals with skills in computer hardware, computer software and electronics.

Associate in science degree
Computer technical support

Certificate of achievement
Computer technical support

Certificate of completion
Computer technical support

Associate in science degree – Computer technical support
This two-year degree program is intended to prepare the student for jobs in business and government as computer support technicians. Principle areas of study are computer software applications, hardware, and basic network principles. Instruction will include the installation, support and repair of microcomputers, especially those attached to local area networks (LANs). To earn a degree, students must complete each course used
to meet a major requirement with a "C" grade or better and maintain an overall GPA of 2.5 or better in the coursework for the major. Certain courses may satisfy both a major and a DVC general education requirement; however, the units are only counted once.

**Certificate of achievement - Computer technical support**

This program is intended to prepare the student for jobs in business and government as computer support technicians. Principle areas of study are computer software applications, hardware, and basic network principles. Instruction will include the installation, support and repair of microcomputers, especially those attached to local area networks (LANs).

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a "C" grade or better and maintain an overall GPA of 2.5 or better in the coursework required for the certificate. Certificate requirements are available in the evening, day and on weekends.

**Certificate of completion - Computer technical support**

This program prepares students for entry-level jobs as computer technicians. Typical jobs would be computer assembly, computer upgrading, and introductory computer repair with an overview of computer networking. The COMTC 110B and COMTC 118 courses help students prepare for the "A+ computer technician" exam. The "A+ computer technician" is intended for individuals with six months or more of computer technician work experience. The A+ exam is administered by Sylvan Prometric off campus and has a fee associated with the exam. The courses listed below change frequently because of new versions of software, so students are advised to consult with the faculty in the computer networking/computer technical support department.

To earn a certificate of completion, students must complete each course used to meet a certificate requirement with a "C" grade or better and maintain an overall GPA of 2.5 or better in the coursework required for the certificate. Certificate requirements are available in the evening and some are offered in the day and on weekends.
COMTC-120 Computer Systems Troubleshooting
4 units LR
May be repeated once
Prerequisites: COMTC 110B, COMTC 118
This advanced level course provides instruction in computer systems troubleshooting and configuration for both hardware and software. Students will learn problem-solving techniques and how to solve problems using diagnostic software and hardware. Troubleshooting techniques will be applied through laboratory exercises. CSU

COMTC-150 Topics in Computer Service
3-4 units SC
May be repeated three times
Variable hours
A supplemental course in Computer Service Technology to provide a study of current concepts and practices in computer servicing and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

**Construction – CONST**

Physical Science and Engineering Division
Dennis Smith, Dean
Physical Science Building 261
925-685-1230 x 2359

Possible career opportunities
Students completing a certificate in construction are qualified for positions in middle management in the building and construction inspection field, and in supervision for the construction industry.

Certificates of achievement
- Construction and building inspection
- Construction management
- Construction supervision and superintendency

Certificate of achievement – Construction and building inspection
This program is designed to prepare students for a career in building or construction inspection, and it is also valuable for those already employed in the field who wish to upgrade their skills.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a "C" grade or better. Certificate requirements can be completed by attending classes in the day, the evening, or both.

**required courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONST 106</td>
<td>Blueprint Reading</td>
<td>2</td>
</tr>
<tr>
<td>CONST 114</td>
<td>Construction Details and Specifications</td>
<td>3</td>
</tr>
<tr>
<td>CONST 170</td>
<td>Fundamentals of Building Inspection</td>
<td>3</td>
</tr>
<tr>
<td>CONST 181</td>
<td>Building Code Interpretation: Non-Structural</td>
<td>3</td>
</tr>
<tr>
<td>CONST 182</td>
<td>Building Code Interpretation: Structural</td>
<td>3</td>
</tr>
<tr>
<td>BUSMG 120</td>
<td>Introduction to Management Studies</td>
<td>3</td>
</tr>
<tr>
<td>BUSMG 121</td>
<td>Practices and Concepts of Supervision</td>
<td>3</td>
</tr>
<tr>
<td>CONST 114</td>
<td>Blueprint Reading</td>
<td>2</td>
</tr>
<tr>
<td>CONST 116</td>
<td>Surveying Related to Construction</td>
<td>2</td>
</tr>
<tr>
<td>CONST 124</td>
<td>Construction Details and Specifications</td>
<td>3</td>
</tr>
<tr>
<td>CONST 244</td>
<td>Estimating</td>
<td>3</td>
</tr>
<tr>
<td>CONST 245</td>
<td>Estimating</td>
<td>3</td>
</tr>
<tr>
<td>CONST 273</td>
<td>Construction Management Studies</td>
<td>3</td>
</tr>
<tr>
<td>CONPL 120</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>CONPL 121</td>
<td>Surveying Related to Construction</td>
<td>2</td>
</tr>
<tr>
<td>CONPL 123</td>
<td>Construction Details and Specifications</td>
<td>3</td>
</tr>
<tr>
<td>CONPL 244</td>
<td>Estimating</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units required: 28

**Certificate of achievement - Construction management**

This two-year program is designed to prepare students for positions in middle management or as technicians in the construction industry, working with a contractor, architect, engineer, or supplier and including such duties as material takeoff, estimating costs, purchasing, and timekeeping.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a "C" grade or better. Certificate requirements can be completed by attending classes in the day, the evening, or both.

**required courses**

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<tbody>
<tr>
<td>ARCH 222</td>
<td>Architectural Working Drawings I</td>
<td>3</td>
</tr>
<tr>
<td>COMSC 100</td>
<td>Introduction to Computers and Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>COMSC 100L</td>
<td>Introduction to Computer Software</td>
<td>1</td>
</tr>
<tr>
<td>CONST 135</td>
<td>Construction Processes</td>
<td>4</td>
</tr>
<tr>
<td>CONST 136</td>
<td>Construction Processes</td>
<td>4</td>
</tr>
<tr>
<td>CONST 144</td>
<td>Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td>CONST 244</td>
<td>Estimating</td>
<td>3</td>
</tr>
<tr>
<td>CONST 273</td>
<td>Construction Management</td>
<td>3</td>
</tr>
<tr>
<td>CONST 276</td>
<td>Legal Aspects-Construction Industry</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 130</td>
<td>Introduction to Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGIN 111</td>
<td>Mathematics for Technicians</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 110</td>
<td>Elementary Physics</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units required: 37

**Certificate of achievement - Construction and supervision and superintendency**

This program is designed for those preparing for supervision responsibilities in the construction industry.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a "C" grade or better. Certificate requirements can be completed by attending classes in the day, the evening, or both.

**required courses**

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<td>CONPL 244</td>
<td>Estimating</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units required: 28
CONST-114 Blueprint Reading
2 units SC
27 hours lecture / 27 hours laboratory per term
Blueprint reading skills in the building industry. CSU

CONST-116 Surveying Related to Construction
2 units SC
18 hours lecture / 36 hours laboratory per term
Recommended: ENGIN 111 or equivalent
Introduction to the principles of surveying related to construction. Emphasis on care and use of equipment, differential leveling, building layout, layout for earthwork and pipelines, contours, cross-sections, cut and fills, slope staking, and earthwork computations. CSU

CONST-124 Construction Details and Specifications
3 units SC
54 hours lecture per term
Recommended: CONST 114 or equivalent
Advanced study of construction drawings of reinforced concrete, structural steel, and heavy timber buildings. Interpretation of details and in-depth correlation of heavy construction trade drawings. Relationships of trades and integration of submittal and shop drawings. CSU

CONST-135 Construction Processes
4 units SC
54 hours lecture / 54 hours laboratory per term
Note: this course will benefit anyone wishing to buy, build, maintain, or sell a house. It lays the foundation for further study of other construction courses
A basic course to introduce the student to the construction industry. A study of the processes of light construction, covering code requirements in new construction and causes of problems in home maintenance. CSU

CONST-136 Construction Processes
4 units SC
54 hours lecture / 54 hours laboratory per term
A study of the processes of heavy construction, covering plans, construction sites, layout, substructures, superstructures of concrete, steel, and wood. CSU

CONST-144 Materials of Construction
3 units SC
54 hours lecture per term
A study of the performance characteristics of construction materials. Covers testing concepts and procedures. Includes basic properties of metals, concrete, timber, masonry, and roofing materials with emphasis on construction applications. CSU

CONST-150 Topics in Construction
.3-.4 units SC
May be repeated three times
Variable hours
A supplemental course in construction designed to provide a study of current concepts and problems in construction and related subdivisions. Specific topics to be announced in the schedule of courses. CSU

CONST-170 Fundamentals of Building Inspection
3 units SC
54 hours lecture per term
Recommended: CONST 136 or equivalent
A study of basic construction inspection procedures, legal responsibility, structure, occupancy, safety, and proper record keeping. CSU

CONST-181 Building Code Interpretation: Non-Structural
3 units SC
54 hours lecture per term
Recommended: CONST 170
Acquaints the student with legal requirements associated with building inspection. Development of checklists and knowledge of a nonstructural plan check review. CSU

CONST-181 Building Code Interpretation: Structural
3 units SC
May be repeated once
54 hours lecture per term
Recommended: CONST 136 or equivalent
Acquaints the student with legal requirements associated with building inspection. Development of checklists and knowledge of a structural plan check review. CSU

CONST-183 Title 24: Energy Conservation/Handicap Codes
3 units SC
May be repeated once
54 hours lecture per term
Recommended: CONST 170 and/or 124 or equivalent
Note: valuable assistance for building instructors and contractors
Course of study for the application of Title 24 Code mandates relating to construction of handicap facilities and energy conservation requirements in construction. CSU

CONST-191 Plumbing Code Interpretation
3 units SC
May be repeated once
54 hours lecture per term
Recommended: CONST 170 or equivalent
Interpretation, understanding and application of codes and standards as they apply to construction of plumbing systems. CSU
CONST-192 Mechanical Code Interpretation  
3 units SC  
54 hours lecture per term  
Recommended: CONST 170 or equivalent  
Interpretation, understanding and application of codes and standards as they apply to construction of mechanical systems. CSU

CONST-244 Estimating  
3 units SC  
54 hours lecture per term  
Recommended: CONST 114 or equivalent, or CONST 135 or equivalent  
A basic course in estimating cost of labor and materials for residential construction. CSU

CONST-245 Estimating  
3 units SC  
54 hours lecture per term  
Recommended: CONST 244 or equivalent  
A course in estimating quantities of materials and costs of materials, labor, and miscellaneous items for commercial buildings. CSU

CONST-273 Construction Management  
3 units SC  
54 hours lecture per term  
Recommended: CONST 114, 135, 170, or ARCHI 222 or equivalent  
Introduction to and application of administrative procedures, contracts, plans and specifications, schedules, diaries, inspections, report writing, and other forms of communication in the construction field. CSU

CONST-276 Legal Aspects of the Construction Industry  
3 units SC  
54 hours lecture per term  
A summary of the legal implications of the duties of a construction supervisor, superintendent, or contractor. Attention given to contracts and their interpretations. Emphasis on the practical aspects. CSU

CONST-298 Independent Study  
.5-3 units SC  
May be repeated three times  
Variable hours  
Prerequisite: submission of acceptable educational contract to department of instruction office; topics must extend study beyond courses offered  
An opportunity for advanced students to study special interests under the direction of the faculty. CSU

Cooperative education – COOP

Students may earn units for learning on-the-job through Cooperative Education. It is part of the total educational process that assists students in exploring and wisely choosing a career, preparing for full-time employment, and advancing in careers of their choice. The course is designed for students whose jobs relate to their college major or career goals and provides on-the-job training in business and industrial establishments under supervision of a college instructor and is facilitated by the use of learning objectives.

Counseling Division  
Terry Armstrong, Dean  
Counseling Center 111  
925-685-1230 x 2288

These courses are for students who are working full or part-time and interested in earning units while gaining practical work experience, either for pay, as interns or as volunteers. College credit is granted for the following: COOP 160: Students who are employed but have not declared major or their jobs are unrelated to the major. COOP 170: Students who are employed and their jobs are related to their major. COOP 170A: Students who are participating in internship or volunteer opportunities in jobs that are related to their major.

COOP-160 General Work Experience Education  
1-3 units LR  
May be repeated three times  
Variable hours  
Co-requisite: concurrent enrollment in either CARDV 110, 120, 130, 140, 150 or 155  
Note: approval by Career Development office; enrollment in a minimum of seven units. 1 unit for 5 hours work per week or 75 hours work per term. Does not meet requirements for veterans' benefits  
Cooperative Education is part of the total educational process that assists students in exploring and wisely choosing a career, preparing for full-time employment and advancing in careers of their choice. The plan combines college study and work to give students the broadest possible preparation for a career and has the uniqueness of turning business, industry, and government agencies of the community into an expanded educational training lab. The course is designed for students whose jobs do not relate to their college major or career goal and provides an opportunity to explore areas of career interest, increase learning and responsibilities on current jobs under the supervision of a college instructor with the intent of assisting them to acquire desirable work habits, attitudes, and career awareness. CSU
COOP-170 Occupational Work Experience Education
1-4 units LR
May be repeated three times
Variable hours
Note: approval by Career Development office; enrollment in a minimum of seven units each semester, including cooperative education and career development. Hours by arrangement - 1 unit for 5 hours per week or 75 hours per semester (paid work). This course is designed for students who have selected a major or career goal. Students may earn units for learning on-the-job through Cooperative Education. It is part of the total educational process that assists students in exploring and wisely choosing a career, preparing for full-time employment, and advancing in career of their choice. The course is designed for students whose jobs relate to their college major or career goal and provides on-the-job training in business and industrial establishments under supervision of a college instructor and is facilitated by the use of learning objectives. CSU

COOP-170A Internship in Occupational Work Experience Education
1-4 units LR
May be repeated three times
Variable hours
Note: approval by Career Development office; enrollment in a minimum of seven units each semester, including cooperative education and career development. Hours by arrangement - 1 unit for 5 hours per week or 75 hours per semester (paid work). 1 unit for 4 hours work per week or 60 hours work per term (unpaid work).

The plan combines college study and work to give students the broadest possible preparation for a career and has the uniqueness of turning business, industrial establishments under supervision of a college instructor and is facilitated by the use of learning objectives. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or interest. Internships may be paid, non paid, or some partial compensation provided. The duration of an internship is one to four terms, four to twenty hours per week. Intern program students earn college credit through the Department of Cooperation Work Experience Education. CSU

COUNS-075 Topics in College Readiness
.3-4 units CR/NC
May be repeated three times
Not degree applicable
Variable hours
A supplemental course which provides a variety of topics for students preparing for college-level work. Specific topics will be announced in the schedule of courses.

COUNS-100 Group Counseling
.3-4 units CR/NC
May be repeated once
Not degree applicable
Variable hours
An interpersonal experience designed to develop self-awareness and to increase understanding of and competence in interpersonal relationships.

COUNS-105 Orientation to College
.3-2 units CR/NC
Variable hours
An introduction to college which is designed to provide students with a concrete plan for understanding and succeeding in college. Topics include: identification of educational and career goals, strategic use of student services, academic assessment (effective course selecting and scheduling), geographical orientation, counseling and advising.

COUNS-106 Orientation to College for the Student-Athletes
.3-2 units CR/NC
Variable hours
An introduction to college for student-athletes, designed to provide students with a concrete plan for understanding and succeeding in college. Topics include: overview of the higher education system in California, identification of educational and career goals, strategic use of student services, academic assessment, effective course selection and scheduling, geographical orientation, counseling and advising, NCAA, COA (Commission on Athletics) and DVC regulations as well as campus services for student-athletes will be emphasized.

COUNS-107 Orientation to College for International Students
.3-2 units CR/NC
Variable hours
An introduction to college for international students, designed to provide students with a concrete plan for enrolling and succeeding in college. Topics include: overview of the higher education systems in California, identification of educational and career goals, strategic use of student services, academic assessment, effective course selection and scheduling, geographical orientation, counseling and advising, DHS (Dept. of Homeland Security) and DVC regulations as well as campus services for international students will be emphasized.

Possible career opportunities
Diablo Valley College’s counseling courses are designed to assist students in identifying educational and career goals, and enhancing their success by way of instruction in career and educational planning, and student success strategies.
COUNS-110 Career Planning
1.5 units CR/NC
27 hours lecture per term
Note: testing fee required
This course assists students toward effective career choices and practical decision-making in selecting a major. Participants are introduced to effective career planning resources including print, internet, and database material, exploration of employer’s needs, employment and educational requirements for chosen occupations. Vocational assessments are also utilized to evaluate each student’s preferred work values, interests, skills and personality traits. CSU

COUNS-115 Resiliency and Student Success
1 unit CR/NC
18 hours lecture per term
Recommended: eligibility for ENGL 116/118
A course designed to help students explore their explanatory style, identify and practice the development of new critical thinking skills and strategies to become more resilient in dealing with problems and more successful in educational endeavors. Students will have the opportunity to gain new insight into their own thought processes while learning creative and constructive ways to deal with adversity. CSU

COUNS-120 Student Success
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
An intensive course designed to assist students to identify and develop critical thinking and problem-solving skills that will facilitate their adjustment to the college environment and the productive pursuit of their educational objectives. The goal is to develop effective behavior patterns through self-evaluation related to many relevant areas such as motivation and discipline, memory development, time management, resource utilization, effective student behavior, and handling social and personal issues that face many college students. CSU, UC

COUNS-130 Ensuring Transfer Success
1.5 units SC
27 hours lecture per term
Recommended: eligibility for ENGL 116/118 or equivalent
In this course, a student learns how to build an individual transfer plan that is well organized and customized to an individual’s life circumstance and educational goals. Students explore the world of transfer from academic, financial, and personal development perspectives. CSU

COUNS-150 Topics in Counseling
.3-4 units SC
May be repeated three times
Variable hours
This course is designed to specifically address topics in personal and social development, such as current concepts and issues arising from individual, family, college, and world of work challenges. Specific topic will be announced in the schedule of courses. CSU

Culinary arts – CULN and HRMCU

Business Division
Krista Johns, Dean
Business and Foreign Language Building 204
925-685-1230 x 2199

Possible career opportunities
The culinary arts program provides professional training for employment as a chef, culinary supervisor, cookbook author, recipe taster, cook, kitchen manager, food server, caterer, food researcher, banquet chef, dining room manager, food stylist, menu planner, community nutrition specialist, and school food-service specialist.

The baking program is designed to prepare students to work as pastry chefs in local restaurants, hotels, resorts, bakeries, and catering establishments. Career options include bakery production finisher, pastry decorator, caterer, baker assistant, bakery entrepreneur, and bakery chef at grocery food chains, cafes, restaurants, bakeries, hospitals, resorts, child care facilities, cafeterias, food preparation centers, and catering facilities.

The restaurant management program prepares students to enter the restaurant field as a manager-trainee in a food service establishment. Career options include: restaurant owner/operator, hotel banquet manager, dining room manager, purchasing specialist, catering manager, and food editor. Some career options may require more than two years of college study.

Certificates of achievement
Baking and pastry
Culinary arts
Restaurant management
Hotel administration (inactive)

Certificate of achievement - Baking and pastry
This in-depth training program prepares students for many entry-level positions in small and large bakeries, specialty pastry shops, dessert catering, and dessert preparation in restaurants. Our graduates enter the baking and pastry field, and many have started their own businesses.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better. Certificate requirements may only be completed by attending a combination of day and evening classes.

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CULN 105 Introduction to the Kitchen</td>
<td>0.5</td>
</tr>
<tr>
<td>CULN 110 Orientation to Hospitality</td>
<td>3</td>
</tr>
<tr>
<td>CULN 120 Fundamentals of Cuisine</td>
<td>5</td>
</tr>
<tr>
<td>CULN 153 Safety and Sanitation</td>
<td>2</td>
</tr>
<tr>
<td>CULN 180 Fundamentals of Baking</td>
<td>3.5</td>
</tr>
<tr>
<td>CULN 185 Nutritional Guidelines in Food Preparation</td>
<td>2</td>
</tr>
<tr>
<td>HRMCU 211 Patisserie</td>
<td>2</td>
</tr>
<tr>
<td>HRMCU 214 Cake and Pastry Decorating</td>
<td>2</td>
</tr>
<tr>
<td>HRMCU 215 Sugar Arts</td>
<td>2</td>
</tr>
</tbody>
</table>
Certificate of achievement - Culinary arts

This in-depth, hands-on training program prepares students for a professional culinary career. Our certificate program is accredited by the American Culinary Federation Educational Institute, a national organization of professional chefs. Our graduates enter the culinary field, and many have progressed to the position of executive chef.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better. Certificate requirements may only be completed by attending a combination of day and evening classes.

**required courses**

- **CULN 105** Introduction to the Kitchen .................................. 0.5
- **CULN 110** Orientation to Hospitality ..................................... 3
- **CULN 120** Fundamentals of Cuisine ....................................... 2
- **CULN 127** Garde Manger .................................................... 2
- **CULN 153** Safety and Sanitation .......................................... 2
- **CULN 160** Fundamentals of Wine and Spirits .......................... 3
- **CULN 165** Dining Room Operations ...................................... 2
- **CULN 166** Dining Room Operations Laboratory ..................... 2
- **CULN 180** Fundamentals of Baking ....................................... 2
- **CULN 185** Nutritional Guidelines in Food Preparation ............. 2
- **CULN 190** Purchasing Systems and Operations ...................... 2
- **CULN 191** Purchasing Systems and Operations Laboratory .......... 2
- **CULN 220** Advanced Cuisine ............................................. 2
- **CULN 224** Catering Business and Operations ......................... 2

**plus at least 2 units from:**

- **CULN 150** Topics in Culinary Arts ...................................... 0.3-4
- **CULN 155** Topics in Culinary Management ................................ 0.3-4
- **CULN 155** Topics in Culinary Management ................................ 0.3-4
- **COOP 170** Occupational Work Experience .............................. 1-4
- **COOP 170A** Internship in Occupational Work Experience ........... 1-4
- **CULN 225** Laboratory Topics in Catering and Special Events ........ 0.3-4

**Total units required** ................................. 28

Certificate of achievement - Restaurant management

Our in-depth, hands-on training program prepares students to begin their careers in restaurant management. Our graduates enter the hospitality industry, and many progress to management positions.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better. Certificate requirements may only be completed by attending a combination of day and evening classes.

**required courses**

- **CULN 105** Introduction to the Kitchen .................................. 0.5
- **CULN 110** Orientation to Hospitality ..................................... 3
- **CULN 120** Fundamentals of Cuisine ....................................... 2
- **CULN 153** Safety and Sanitation .......................................... 2
- **CULN 160** Fundamentals of Wine and Spirits .......................... 3
- **CULN 165** Dining Room Operations ...................................... 2
- **CULN 166** Dining Room Operations Laboratory ..................... 2
- **CULN 185** Nutritional Guidelines in Food Preparation ............. 2
- **CULN 191** Purchasing Systems and Operations ...................... 2
- **CULN 191** Purchasing Systems and Operations Laboratory .......... 2
- **CULN 220** Advanced Cuisine ............................................. 2
- **CULN 224** Catering Business and Operations ......................... 2

**plus at least 2 units from:**

- **CULN 150** Topics in Culinary Arts ...................................... 0.3-4
- **CULN 155** Topics in Culinary Management ................................ 0.3-4
- **CULN 155** Topics in Culinary Management ................................ 0.3-4
- **COOP 170** Occupational Work Experience .............................. 1-4
- **COOP 170A** Internship in Occupational Work Experience ........... 1-4
- **CULN 225** Laboratory Topics in Catering and Special Events ........ 0.3-4

**Total units required** ....................................... 34.5

Certificate of achievement - Hotel administration

The HRM department has requested that this program be placed on inactive status during the completion of needed curriculum work. While the necessary curriculum evaluation and revision is underway the certificate will be removed from the catalog but remain active on the state approval list. The department anticipates that curriculum revisions needed for a viable certificate will be completed within two years. Students should be advised that it is not currently possible to complete the requirements for the Hotel Administration program as listed in earlier catalogs. Students currently in the program are advised to see a DVC counselor at their earliest convenience.

**CULN -105** Introduction to the Kitchen

0.5 unit  SC

27 hours laboratory per term

This course prepares students to begin the culinary arts program. It is for students who do not have familiarity with kitchen knife handling and working in the kitchen. This course provides an introduction to basic skills and safety practices. CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Type</th>
<th>Prerequisites</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>CULN -110</td>
<td>Orientation to Hospitality</td>
<td>3</td>
<td>SC</td>
<td></td>
<td>This course provides an introduction to career opportunities in food service, explores trade publications and professional organizations, and presents the basic organization and function of departments within hospitality and food service establishments. CSU</td>
</tr>
<tr>
<td>CULN -120</td>
<td>Fundamentals of Cuisine</td>
<td>5</td>
<td>SC</td>
<td>Prerequisite: CULN 105 or equivalent</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Co-requisite: CULN 153, or equivalent</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Recommended: eligibility for ENGL 122 or equivalent</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Note: formerly HRMCU 127</td>
<td></td>
</tr>
<tr>
<td>CULN -127</td>
<td>Garde Manger</td>
<td>2</td>
<td>SC</td>
<td>Prerequisite: CULN 120 or equivalent</td>
<td>A study of the artistic side of cold food preparation from basic garnishes to advanced forcement preparations such as galantines, pates and mousse. Emphasis on decorated platters, buffets, and food show competitions. CSU</td>
</tr>
<tr>
<td>CULN -150</td>
<td>Topics in Culinary Arts</td>
<td>.3-.4</td>
<td>SC</td>
<td>May be repeated three times</td>
<td>A supplemental course in culinary arts to provide a study of current concepts and problems in culinary arts and related subdivisions. Specific topics will be announced in the schedule of courses. CSU</td>
</tr>
<tr>
<td>CULN -153</td>
<td>Safety and Sanitation</td>
<td>2</td>
<td>SC</td>
<td>36 hours lecture per term</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Recommended: eligibility for ENGL 122 or equivalent</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Note: formerly HRMGFT 153</td>
<td></td>
</tr>
<tr>
<td>CULN -155</td>
<td>Topics in Culinary Management</td>
<td>.3-.4</td>
<td>SC</td>
<td>May be repeated three times</td>
<td>A supplemental course in culinary management to provide a student of current concepts and problems in culinary management and related subdivisions. Specific topics will be announced in the schedule of courses. CSU</td>
</tr>
<tr>
<td>CULN -160</td>
<td>Fundamentals of Wine and Spirits</td>
<td>3</td>
<td>SC</td>
<td>54 hours lecture per term</td>
<td>This course provides an extensive examination of beverage service operations and control, basic production and types of wines and spirits, merchandising, and regulations concerning service of alcoholic beverages. CSU</td>
</tr>
<tr>
<td>CULN -165</td>
<td>Dining Room Operations</td>
<td>2</td>
<td>SC</td>
<td>36 hours lecture per term</td>
<td>Principles and techniques of dining room service and management, including various table settings and methods of service. CSU</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Co-requisite: CULN 166 or equivalent</td>
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</tr>
<tr>
<td>CULN -166</td>
<td>Dining Room Operations Laboratory</td>
<td>2</td>
<td>SC</td>
<td>May be repeated once</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>108 hours laboratory per term</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Co-requisite: CULN 153 or equivalent and CULN 165 or equivalent</td>
<td></td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td>Note: formerly HRMGFT 150 (laboratory component)</td>
<td></td>
</tr>
<tr>
<td>CULN -180</td>
<td>Fundamentals of Baking</td>
<td>3.5</td>
<td>SC</td>
<td>18 hours lecture / 135 hours laboratory per term</td>
<td>An applied and theoretical study of basic principles of commercial baking as practiced in hotels, restaurants and retail bakeries. Students apply fundamentals of baking science to the preparation of a variety of products, learning to use and care for equipment normally found in the bakeshop or baking areas. CSU</td>
</tr>
</tbody>
</table>
CULN -185  Nutritional Guidelines in Food Preparation
2 units  SC
36 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
Note: formerly HRMCU 185
Introduction to food composition, dietary guidelines, recipe modification, food cooking and storage techniques for nutrient retention, and contemporary nutritional issues. CSU

CULN -190  Purchasing Systems and Operations
2 units  SC
36 hours lecture per term
Co-requisite: CULN 191 or equivalent
Recommended: eligibility for ENGL 122 or equivalent; MATH 110 or equivalent
An application of principles in inventory control management, storage, and receiving. Fundamentals of purchasing based on analysis of quality, yield, cost of food and merchandise used in food service, control of purchases, receiving, storing, and issuing procedures using current computer application. CSU

CULN -191  Purchasing Systems and Operations Laboratory
2 units  SC
May be repeated once
108 hours laboratory per term
Co-requisite: CULN 153 or equivalent and CULN 190 or equivalent
Note: formerly HRMGT 181 (laboratory component)
This course is a laboratory application of inventory control, food storage, and receiving. Purchasing food merchandise based on analysis of quality, yield, cost of food, purchase control and issuing procedures using current computer applications. CSU

CULN -220  Advanced Cuisine
5 units  SC
270 hours laboratory per term
Prerequisite: CULN 120 or equivalent
Recommended: eligibility for ENGL 122 or equivalent
Note: formerly HRMCU 220
This course builds upon student skills honed in the fundamentals of cuisine course, emphasizing preparation of individual plates. Seasonal cooking and market variations, healthy cooking, curing meats, preparing flavored oils and dressing, and composition of effective menu items are integrated into the food preparation activities. CSU

CULN -224  Catering Business and Operations
2 units  SC
36 hours lecture per term
Note: formerly HRMGT 154
An introduction to operating a catering business including effective client relations, event planning, pricing and cost controls, legal issues, equipment requirements and menu planning for a variety of events such as banquets, ethnic and a la carte affairs.

CULN-225  Laboratory Topics in Catering and Special Events
.3-4 units  CR/NC
May be repeated three times
Variable hours
Co-requisite: CULN 153 or equivalent
Recommended  CULN 120 or equivalent, eligibility for ENGL 122 or equivalent;
Note: formerly HRMCU 256, 257, 259 and HRMGT 258.
A catering applications course integrating catering fundamentals with specific events and themes. Events will vary by course section. Students will apply their food preparation and service skills to different needs of catering clients. CSU

HRMCU-211  Patisserie
2 units  LR
May be repeated once
27 hours lecture / 27 hours laboratory per term
Recommended: basic baking math, reading, and study skills;
The study and preparation of refined pastries and desserts; petit fours, tarts, Bavarians, charlottes, mousses, soufflés, ice creams, sorbets, custards, puddings, and cakes. CSU

HRMCU-214  Cake and Pastry Decorating
2 units  LR
May be repeated once
18 hour lecture / 36 hours laboratory per term
Recommended: HRMCU 211 or equivalent
A course of practical instruction and skill development in cakes; birthday, special occasion, wedding, and pastry decoration. CSU

HRMCU-215  Sugar Arts
2 units  LR
May be repeated once
18 hour lecture / 36 hours laboratory per term
Recommended: HRMCU 211 or equivalent
A course in practical instruction and skill development in sugar work, marzipan, chocolate, holiday confections, and advanced cake decoration. CSU

HRMCU-226  California Cuisine
2 units  LR
May be repeated once
27 hours lecture / 27 hours laboratory per term
Recommended: eligibility for ENGL 116/118
This course is an introduction and demonstration of professional culinary preparations and presentations of California cuisine. Emphasis will be on cooking methods and ingredients that are freshly abundant in our state. Discussion will also stress the importance of California cuisine in today's market and health conscious society. CSU

HRMCU-228  International Cuisine
2 units  LR
May be repeated once
27 hours lecture / 27 hours laboratory per term
Recommended: eligibility for ENGL 122
Introduction and presentation of cuisines from around the world in the context of cultural, social and historical perspectives.
Emphasis will be on cultural contrast that reflects the ethnic culinology of at least three non-European countries (e.g. Egypt, China, and India). This course will develop an understanding of ethnic cuisine in today’s multi-cultural society and its significance and influence on (North) American culture. CSU

HRMCU-298 Independent Study
.5-3 units SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered
An opportunity for selected students to pursue special interests under direction of the faculty. CSU

Dental assisting – DENTL

Biological and Health Sciences Division
Dean of Biological and Health Sciences
Science Center Building 102
925-685-1230 x 2442

Possible career opportunities
While most dental assistants find employment in dental offices, opportunities for employment also exist in clinics and hospitals, insurance agencies, dental x-ray laboratories, and supply houses. The dental assisting program provides an excellent path for those interested in a variety of positions in the dental field. With training from the program, students can choose a profession as a dental technician, a small business owner in the dental field, a marketing agent for a commercial laboratory, or a sales representative for a dental supplier. Dental assisting students can also choose to continue their education to become a dental hygienist or a dentist.

Associate in science degree
Dental assisting

Certificate of achievement
Dental assisting

Associate in science degree – Dental assisting
The associate in science program in dental assisting prepares students for administrative support and chair side assisting in dental offices, hospitals and clinics, insurance agencies, dental x-ray laboratories and supply houses. The program of classroom instruction and clinical experience, along with general education, leads to the associate degree in dental assisting. To earn a degree, students must complete each of the required courses with a “C” grade or better. Major requirements for dental assisting courses are only available in the day. General education courses are available in the day or evening.

The dental assisting program is accredited by the Commission on Dental Accreditation of the American Dental Association, and the United States Department of Education. Students completing the degree or certificate program in dental assisting are eligible to take California’s Registered Dental Assistant examination and the national Certified Dental Assistant examination.

Selected classes may meet lower division requirements for a bachelor’s degree at selected campuses of CSU or the Bachelor of Arts at private universities. Consult with counselors for more information.

To be eligible for enrollment in the dental assisting program, students must complete the specified prerequisite course DENTL 120 (six hour course), which is offered during the first two weeks of June. Students in the program must complete a health care provider cardiopulmonary resuscitation course and have a valid copy of the certification card on file in the Dental Assisting Office by January of their second semester.

HRMCU-298 Independent Study
.5-3 units SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered
An opportunity for selected students to pursue special interests under direction of the faculty. CSU

Possible career opportunities
While most dental assistants find employment in dental offices, opportunities for employment also exist in clinics and hospitals, insurance agencies, dental x-ray laboratories, and supply houses. The dental assisting program provides an excellent path for those interested in a variety of positions in the dental field. With training from the program, students can choose a profession as a dental technician, a small business owner in the dental field, a marketing agent for a commercial laboratory, or a sales representative for a dental supplier. Dental assisting students can also choose to continue their education to become a dental hygienist or a dentist.

Associate in science degree
Dental assisting

Certificate of achievement
Dental assisting

Associate in science degree – Dental assisting
The associate in science program in dental assisting prepares students for administrative support and chair side assisting in dental offices, hospitals and clinics, insurance agencies, dental x-ray laboratories and supply houses. The program of classroom instruction and clinical experience, along with general education, leads to the associate degree in dental assisting. To earn a degree, students must complete each of the required courses with a “C” grade or better. Major requirements for dental assisting courses are only available in the day. General education courses are available in the day or evening.

The dental assisting program is accredited by the Commission on Dental Accreditation of the American Dental Association, and the United States Department of Education. Students com-
Students are expected to take one or two of these courses in the summer prior to entering the program. Those considering applying to the dental hygiene program are required to take English 122, Psychology 122 and Speech 121 unless they hold a baccalaureate degree or higher.

**Recommended Course**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENTL 110</td>
<td>Overview of the Dental Profession</td>
<td>1.5</td>
</tr>
</tbody>
</table>

(Offered mid-Spring semester)

### DENTL-110 Overview of the Dental Profession

1.5 units  CR/NC

27 hours per term

**Recommended:** eligibility for ENGL 122 or equivalent

**Note:** this course is open to all students. Formerly DENTL 080

An overview of the dental profession with special emphasis on assisting, hygiene and dental technology concepts. This course may be particularly helpful to the students desiring to enter dental assisting, dental hygiene or dental technology programs. CSU

### DENTL-120 Orientation to the Dental Assisting Program

.3 unit  CR/NC

6 hours lecture per term

**Note:** students must complete health requirements before the beginning of the fall semester. This will allow the student to work on one another, on patients in the dental assisting clinic on patients at the University of the Pacific Dental School, and in the dental internship offices.

This course is designed for all students interested in enrolling into the dental assisting program. The orientation course will provide the student with detailed enrollment information and the health protocol standards for the dental assistant student. Emphasis will be placed on laboratory asepsis, infection control and disease transmission. Information will be given on the supplies and equipment needed for disease prevention in compliance with regulatory agencies such as the Dental Board of California, Center for Disease Control and Prevention (CDC) and the Occupational Safety and Health Administration (OSHA). Career pathways of dental assisting, professionalism, malpractice insurance and dental assisting organizations will be discussed. Guidelines from the Dental Practice Act Rules and Regulations will be presented in relationship to the dental assistant, registered dental assistant, and the registered dental assistant in extended functions. CSU

### DENTL-150 Topics in Dental Assisting

.3-.4 units  SC

May be repeated three times

Variable hours

A supplemental course in Dental Assisting to provide a study of current concepts and methods in Dental Assisting and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

### DENTL-171 Oral Facial Structures and Body Systems

3.5 units  LR

54 hours lecture / 27 hours laboratory per term

**Prerequisite:** DENTL 120 or equivalent.

**Recommended:** eligibility for ENGL 122 or equivalent

**Note:** required medical exam, TB clearance, hepatitis immunization, and malpractice insurance

Introduction to general anatomy, body systems, head and neck, with emphasis on the teeth and their supporting structures. CSU
DENTL-172 Dental Radiography I
2 units LR
27 hours lecture / 36 hours laboratory per term
Prerequisite: DENTL 120 or equivalent
Recommended: eligibility for ENGL 122 or equivalent
Note: required medical exam, TB clearance, hepatitis immunization, and malpractice insurance
Principles of oral radiography, to include pre-clinical and clinical application of procedures involved in exposing, processing, mounting and interpretation of dental radiographs. Emphasis will be placed on radiation safety, infection control procedures, management of waste and other related environmental hazards. CSU

DENTL-173 Dental Operative Procedures I
2.5 units LR
27 hours lecture / 54 hours laboratory per term
Prerequisite: DENTL 120 or equivalent
Recommended: eligibility for ENGL 122 or equivalent
Note: required medical exam, TB clearance, hepatitis immunization, and malpractice insurance
Principles of chairside assisting. Operative procedures which include chairside responsibilities, instrument identification, tray setups, four-handed techniques, and sequences of general dentistry procedures. Identification, care and maintenance of the operator and equipment. CSU

DENTL-174 Dental Materials and Laboratory Procedures
2.5 units LR
27 hours lecture / 54 hours laboratory per term
Prerequisite: DENTL 120 or equivalent
Recommended: eligibility for ENGL 122 or equivalent
Note: required medical exam, TB clearance, hepatitis immunization, and malpractice insurance
The study, manipulation, and safe handling of dental materials used in operative and restorative dentistry. Characteristics manipulation and handling of dental laboratory materials and equipment and usage of instruments will also be present. Emphasis on managing infection and hazard control protocol are stressed throughout the course. CSU

DENTL-175 Infection Control, Microbiology Oral Inspection and Theories/Practices of Dental Assisting
2.5 units LR
27 hours lecture / 54 hours laboratory per term
Prerequisite: DENTL 120 or equivalent
Recommended: eligibility for ENGL 122 or equivalent
Note: required medical exam, TB clearance, hepatitis immunization, and malpractice insurance
Emphasis will be placed on physical and laboratory aseptic infection control procedures and disease transmission. Included will be the supplies and equipment needed for disease prevention, both personal and patient and office safety in compliance with regulatory agencies. Topics include: collecting medical/dental health history and vital signs, microbiology of dental disease and application of their relationships to the principles of oral hygiene, signs of periodontal disease and oral cancer, diet and nutrition, oral inspection, dental charting and bacterial of the oral cavity. Orientation to the roles, functions and duties of the members of the dental teams as governed by the Dental Board of California, Committee of Dental Auxiliaries and the California Dental Practice Act. Subject matter will also include career pathways of dental assisting, professionalism, dental specialties and organizations. CSU

DENTL-180 Office Management
3 units LR
54 hours lecture per term
Prerequisite: DENTL 171 or equivalent
Recommended: eligibility for ENGL 122 or equivalent
Note: medical exam, TB clearance, hepatitis immunization, malpractice insurance, and current CPR (GLS for Health Care Provider with AED)
Front office duties include patient management and staff interaction, telephone technique, bookkeeping/financial transactions, patient record maintenance, correspondence, filing, insurance processing, appointment control, and recall systems. Legal and ethical aspects pertaining to dental office records will be presented in this course. Instruction in the implementation of DENTRIX dental software. CSU

DENTL-181 Dental Emergencies, Pharmacology and Oral Pathology
2 units LR
36 hours lecture per term
Prerequisite: DENTL 175 or equivalent
Recommended: eligibility for ENGL 122 or equivalent
Note: medical exam, TB clearance, hepatitis immunization, malpractice insurance, and current CPR (GLS for Health Care Provider with AED)
A course in office preparation, symptoms, assisting in management and legal and ethical responsibilities in the event of a medical or dental emergency. Pathology of the hard and soft tissues of the oral cavity and function of pharmacology are also covered. CSU

DENTL-182 Dental Radiography II
2.5 units LR
27 hours lecture / 54 hours laboratory per term
Prerequisite: DENTL 172 or equivalent recommended: eligibility for ENGLH 122 or equivalent
Note: medical exam, TB clearance, hepatitis immunization, malpractice insurance, and current CPR (GLS from Health Care Provider with AED)
Emphasizes patient management and radiation safety. Infection control procedures in accordance with OSHA and CDC guidelines. Perform and evaluate various types of radiographs and interpretation thereof. Advanced principles and practices of dental radiography with emphasis on technique and diagnostic quality of dental film. CSU
DENTL-183 Advanced Dental Operative Procedures
4.5 units LR
63 hours lecture / 72 hours laboratory per term
Prerequisite: DENTL 173 or equivalent
Recommended: eligibility for ENGL 122 or equivalent
Note: medical exam, TB clearance, hepatitis immunization, malpractice insurance, and current CPR (GLS from Health Care Provider with AED)
Advanced studies and manipulative skills in the specialties of dentistry. These specialties include: orthodontics, pediatrics, oral surgery, periodontics, endodontics, prosthodontics, and public health. Board approved coronal polish and community service dental health projects. CSU

DENTL-184 Clinical Experience
7 units LR
36 hours lecture / 288 hours laboratory per term
Prerequisite: DENTL 174 or equivalent
Recommended: eligibility for ENGL 122 or equivalent
Note: medical exam, TB clearance, hepatitis immunization, malpractice insurance, and current CPR (GLS for health care provider with AED)
Dental assisting experience with emphasis on private dental practice including the various specialties of dentistry. Clinical experience with dental students in a dental school setting. Seminar topics will include: dental office evaluation, job expectations, interviewing skills, resume writing and employment agreements. Written and practical mock exams will be conducted for State and National Board exams upon completion of the program. Two weeks pre-clinical review prior to internship rotation. CSU

DENTL-210 RDA Written Review
1 unit CR/NC
18 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
Note: eligible for California Registered Dental Assistant (RDA) Exam. Formerly DENTL 062
A comprehensive review of Dental Assistant (DA) Registered Dental Assistant (RDA) and Registered Dental Assistant Extended Functions (RDAEF) concepts, practices and legal responsibilities. This course will be particularly helpful to those planning to take the Registered Dental Assistant (RDA) written exam. CSU

DENTL-220 Coronal Polish Certification
.4 unit CR/NC
4.5 hours lecture / 8 hours laboratory per term
Note: current CPR certificate (BLS health care provider with AED), malpractice insurance. Formerly DENTL 064
This is a California Board approved coronal polishing course. This course will teach students to identify a stain and remove it from the coronal part of the tooth. The method of fluoride treatment will be taught as well. CSU

Dental hygiene – DENHY
The following courses are open only to those accepted into the Dental hygiene program.

Dental hygiene

Possible career opportunities
While most dental hygienists find employment in general dental practices, opportunities for employment also exist in specialty practices such as periodontics or pediatric dentistry. Hygienists may be employed to provide dental hygiene services for patients in hospitals, nursing homes and public health clinics.

With additional education, dental hygienists can choose to pursue a teaching career in a dental school or a dental hygiene education program. Research careers, office management, business administration and clinical practice careers, in school or public health programs, also generally require additional education.

Associate in science degree
Dental hygiene

Certificate of achievement
Dental hygiene

Associate in science degree – Dental hygiene
This two-year program of classroom instruction and clinical experience prepares students to perform the educational, clinical (teeth cleaning), and laboratory responsibilities of a dental hygienist. Students are prepared to take the national board examination, California Registered Dental Hygiene examination as well as board examinations in other states. The program is accredited by Commission on Dental Accreditation of the American Dental Association and by the United States Department of Education and approved by the California State Board of Dental Examiners.

To be eligible for enrollment into the dental hygiene program applicants must complete the specified prerequisite courses prior to submitting an application. All science prerequisite courses must be taken within the last five years.

To earn a degree, student must complete the A.S. degree requirements (unless they already hold this or a higher degree) and achieve a grade of “C” or better in each of the required courses. Dental hygiene required program courses are only available in the day. However, required general education courses are available in the day or evening. Students who have the greatest success completing the dental hygiene program have taken the general education courses prior to...
Dental hygiene

application and have an overall GPA of 3.0 or higher. Certain courses may satisfy both a major and a DVC general education requirement; however the units are only counted once.

Students in the dental hygiene program must present a current cardiopulmonary resuscitation card and results of a recent physical examination providing evidence of good health including tuberculosis clearance and immunization at the beginning of their first semester. For dental hygiene program information and an application packet for enrollment contact the Dental Hygiene Department or Counseling Office.

**general education requirements** 27-38

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>BIOSC 120* Introduction to Human Anatomy and Physiology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 108* Introductory Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 109* Introduction to Organic and Biochemistry</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 122 Freshman English: Composition and Reading</td>
<td>3</td>
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*These courses must have been completed within the past five years.

**Total prerequisite units** 23-24

**required general education courses** 9

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**Total general education units** 27-38

**Certificate of achievement – Dental hygiene**

This two-year program of classroom instruction and clinical experience prepares students to perform the educational, clinical (teeth cleaning), and laboratory responsibilities of a dental hygienist. Students are prepared to take the national board examination, California Registered Dental Hygiene examination and many other state board examinations. The program is accredited by the Commission on Dental Accreditation of the American Dental Association and by the United States Department of Education and approved by the California State Board of Dental Examiners.

To be eligible for enrollment into the dental hygiene program applicants must complete the specified prerequisite courses prior to submitting an application. All science prerequisite courses must be taken within the last five years.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better. Dental hygiene required program courses are only available in the day. However, required general education courses are available in the day or evening. Students who have the greatest success completing the dental hygiene program have taken the general education courses prior to application and have an overall GPA of 3.0 or higher.

Students in the dental hygiene program must present a current cardiopulmonary resuscitation card and results of a recent physical examination providing evidence of good health including tuberculosis clearance and immunizations at the beginning of their first semester. For dental hygiene program information and an application packet for enrollment contact the Dental Hygiene Department or Counseling Office.

**program prerequisites or equivalents**

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**Total prerequisite units** 23-24

**required general education courses**

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<tr>
<td>SOCIO 120 Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 120 Fundamentals of Speech</td>
<td>3</td>
</tr>
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</table>

**Total general education units** 9
The course will focus on the dental hygiene human needs conceptual model and its application to the dental hygiene process of care. While all eight human needs related to dental hygiene care will be addressed, special focus will be given to assessments of the human needs for integrity of the skin and mucous membrane and a biologically sound and functional dentition. In addition, dental hygiene diagnosis and identification of dental hygiene interventions will be included. CSU

DENHY-121 Introduction to Comprehensive Clinical Dental Hygiene Care
4 units LR
36 hours lecture / 108 hours laboratory per term
Note: enrollment into the dental hygiene program, TB clearance and medical exam

Introduction to the dental hygiene process, technical skills and procedures used in the clinical practice of dental hygiene. Clinical competency development will focus on client assessments, dental hygiene diagnosis, treatment planning, case presentation and implementation of instrumentation techniques for providing prevention-oriented and therapeutic dental hygiene care. Post treatment evaluation is also emphasized. CSU

DENHY-122 Clinical Dental Hygiene
4 units LR
36 hours lecture / 108 hours laboratory per term
Note: enrollment into the dental hygiene program; certificate in CPR

Application of the dental hygiene process of care guided by the human needs conceptual model to promote oral health and wellness. The course includes laboratory and clinical experiences in client assessments, problem identification (dental hygiene diagnosis), dental hygiene care planning, case presentation and implementation of dental hygiene care (preventive and therapeutic procedures, oral health education). Evaluation of dental hygiene care/oral health goals attainment is also emphasized as an essential component of the dental hygiene process.

DENHY-123 Oral Health Care Education
2 units LR
36 hours lecture per term
Prerequisite: NUTR 160 or equivalent
Note: enrollment into the dental hygiene program

The course is designed to introduce oral hygiene care education theory and practice. The primary focus will be on educational techniques that can be utilized to assist individuals and groups in becoming integrally involved as well as making informed decisions with regard to oral health promotion and disease prevention. Personal mechanical removal of bacterial plaque through use of toothbrushes and oral physiotherapy aids is emphasized. CSU

DENHY-124 Fundamentals of Radiology for the Dental Hygienist
2 units LR
18 hours lecture / 54 hours laboratory per term
Prerequisite: CHEM 108 or equivalent
Note: enrollment into the dental hygiene program

The study of radiology includes principles of radiation physics, biology, radiation safety, imaging theory, analysis of radiographs
and quality assurance. The course focuses on application of the principles of radiology for assessment of the teeth and surrounding structures as an integral component of dental hygiene care and for use in collaborating with other dental professionals to ensure comprehensive oral health care. Contemporary alternative imaging modalities will also be discussed. The laboratory component includes development of values, attitudes and skills to produce radiographs of the highest technical quality with minimum client and operator exposure. CSU

DENHY-125 Head and Neck Anatomy, Histology, and Embryology
4 units LR
54 hours lecture / 54 hours laboratory per term
Prerequisite: BIOSC-120 or equivalent
Note: enrollment into the dental hygiene program
A course concerned with the functions of the head and neck, with special attention being given to the oral cavity. Included is the general micro-anatomy of the tissue and the embryological development of the head and neck. CSU

DENHY-126 Dental Morphology
2 units LR
36 hours lecture per term
Note: enrollment into the dental hygiene program
The study of the structures and forms of the human dentition through combined lecture and laboratory experience. Aspects related to dental hygiene care such as root morphology, restorative charting, occlusion and dental anomalies are emphasized. CSU

DENHY-127 Infection Control: Theory, Practice and Communication
1-2 units LR
Variable hours
Note: enrollment into the dental hygiene program
Presents epidemiology and biomedical information regarding infectious diseases, such as hepatitis, herpes and human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS). This course will include infection control principles, protocols, CDC and OSHA recommendations/regulations and an introduction to effective communication techniques essential for dental hygiene care delivery. CSU

DENHY-128 Periodontics for the Dental Hygienist
2 units LR
36 hours lecture per term
Note: enrollment into the dental hygiene program
The study of the discipline of periodontics. This includes related biological, clinical and behavioral aspects of the disease. Specifically, content will include: etiology, histopathology, epidemiology of the periodontal diseases; anatomical and histological features of the healthy periodontium; dental hygiene diagnosis; the classification of the periodontal diseases; the principles of periodontal therapy including prevention, initial periodontal therapy (biologic basis and rationale); adjunctive therapy; periodontal maintenance; principles of reductive regenerative surgery. CSU

DENHY-129 Contemporary Dental Materials for the Dental Hygienist
1.5 units LR
18 hours lecture / 36 hours laboratory per term
Note: enrollment into the dental hygiene program
The study of dental materials science designed to achieve an understanding of the underlying principles of materials science as they apply to the selection and handling of those materials utilized as part of contemporary comprehensive dental hygiene care. Students will gain knowledge of the basic science and behavior of existing materials within a framework which will enable them to adapt to the rapidly evolving array of new dental materials and techniques in the professional arena. CSU

DENHY-130 Clinical Dental Hygiene
2 units LR
18 hours lecture / 54 hours laboratory per term
Prerequisite: completion of the first year of the dental hygiene program
Note: current certificate in CPR
The course emphasis is on refining skills associated with preventative oral health services, initial periodontal therapy and periodontal maintenance. Improved proficiency will be expected in assessment, planning, problem identification, treatment planning, implementation and evaluation of client-centered dental hygiene care. It is anticipated that the student will have increased opportunities to provide initial periodontal therapy (non-surgical) in order to develop scaling and root planing skills along with the administration of local anesthetics. The seminar portion of this course will focus on the objectives and principles of comprehensive dental hygiene care for clients with special needs.

DENHY-131 Local Anesthesia
1 unit LR
9 hours lecture / 27 hours laboratory per term
Prerequisite: completion of the first year of the dental hygiene program
Note: current certificate in CPR
A course covering the techniques of pain control by the administration of local anesthetics. The course prepares the student for management of the more complex clinical client during advanced dental hygiene care procedures. CSU

DENHY-132 Community Oral Health
2 units LR
36 hours lecture per term
Prerequisite: completion of the first year of the dental hygiene program ENGL 122 or equivalent
The study of oral health and disease in culturally and economically diverse community and public health settings. Course emphasis is on oral health education in a variety of environments with numerous oral health needs. The process of community and public health program planning includes: epidemiology, biostatistics and participation in community health planning and public health programs. CSU
DENHY-133 Behavioral Foundations and Communications Skills for Dental Hygiene Care
1 unit LR
18 hours lecture per term
Prerequisite: completion of the first year of the dental hygiene program
Introduction to principles drawn from the behavioral sciences which provide the knowledge base to guide dental hygienist-client communication. The course will include the basic components of the communication process, verbal and nonverbal communication, therapeutic and non therapeutic communication techniques, listening skills, major theories of motivation, the interrelationship between teaching, learning, and communication. Work will focus on the modification of teaching, learning, and communication techniques appropriate for clients throughout the life span and development of abilities to interact with the many individuals and groups who make up our multicultural environment. CSU

DENHY-150 Topics in Dental Hygiene
0.5-4 units LR
May be repeated three times
Variable hours
Note: enrollment into the dental hygiene program
A supplemental course in dental hygiene to provide a study of current concepts and problems in dental hygiene and related subdivisions. Specific topics will be announced in the schedule of courses.

DENHY-219 Pathology
2 units LR
36 hours lecture per term
Prerequisite: completion of the first year of the dental hygiene program
This course is designed to provide an introduction to clinical and diagnostic general and oral pathology. Emphasis will be placed upon the recognition of the presence of abnormality and the acquisition by the student of sufficient knowledge upon which to base a reasonable differential diagnosis of any lesion which is likely to be met in general dental practice. CSU

DENHY-220 Pharmacology for the Dental Hygienist
3 units LR
54 hours lecture per term
Prerequisite: completion of the first year of the dental hygiene program, CHEM 109 or equivalent
The study of pharmaceuticals used in medicine and dentistry. Emphasis is placed on identifying and understanding drugs by category of therapeutic use (i.e. local anesthetics, antibiotics, anti hypertensives). The underlying physiologic basis for drug action is explored. Adverse reactions including side effects and allergic responses are addressed. The study of Nitrous Oxide as a dental sedative in preparation for the use of this drug clinically is a core component of the course. CSU

DENHY-223 Ethics, Jurisprudence, and Practice Management for the Dental Hygienist
2 units LR
36 hours lecture per term
Prerequisite: completion of the first year of the dental hygiene program
The study of jurisprudence, ethics, and practice management as these concepts relate to dental hygiene care. A personal philosophy toward professional conduct, continued quality improvement, self-assessment and peer evaluation are developed. Management and leadership skills essential for dental hygienists to participate in the practice management and administration of a dental hygiene practice emphasized. CSU

DENHY-224 Integration of Dental Hygiene and Dentistry
1.5 units LR
27 hours lecture per term
Prerequisite: completion of the first year of the dental hygiene program
A course covering various phases of dentistry including restorative dentistry, esthetic dentistry, prosthodontics, endodontics, orthodontics, pediatric dentistry, geriatric dentistry, oral/maxillofacial surgery, and new technology in dentistry. Students are exposed to how these various areas of dentistry are implemented in the general dental practice, how they are related to the practice of dental hygiene, as well as how to make a referral to a dental specialist in the case of the difficult patient. Integration of dental concepts and comprehensive patient care in preparation for future collaborative practice between the dental hygienist and other health care providers is emphasized for each topic area. CSU

DENHY-227 Advanced Periodontal Dental Hygiene Care
2 units LR
36 hours lecture per term
Prerequisite: completion of the first year of the dental hygiene program
Study of advanced principles of clinical dental hygiene care; including advanced instrumentation techniques, soft tissue (gingival) curettage, use of power driven scalers, dental hygiene diagnosis and dental hygiene care planning for clients with periodontal diseases. Current concepts about the adjunctive use of chemical agents in the prevention and treatment of inflammatory periodontal diseases will be explored in the context of dental hygiene care with case-based presentations. Additional supportive treatment procedures, which augment periodontal debridement and oral hygiene self-care, will be incorporated into an evidence-based approach to dental hygiene care. CSU

DENHY-230 Advanced Clinical Dental Hygiene Care
6 units LR
18 hours lecture / 279 hours laboratory per term
Prerequisite: completion of the first year of the dental hygiene program
Note: current certificate in CPR
This is a one semester clinical course designed to expand and develop dental hygiene skills in preventive therapy, oral prophylaxis, initial therapy, and supportive periodontal therapy.
Students will become proficient in scaling and debridement procedures, administration of local anesthetics and nitrous oxide sedation, and gingival curettage. Dental hygiene assessment, diagnosis (based on human need theory) and dental hygiene care planning skills will be refined. Techniques in use and interpretation of radiographs, infection control and time management will be further developed. The student will also become proficient in adjunct therapeutic skills such as the local placement of antimicrobial agents. Learning experiences will be conducted within a human needs framework. Dental hygiene care will be client centered. The course will consist of seminar and clinical experiences. Students will develop skills by working with clients in the college clinic and in outside clinical environments. The educational focus is on refinement of periodontal process skills in scaling and debridement, the application of advanced instrumentation principles and early self assessment skills.

**Dental laboratory technology – DENTE**

The following courses are open only to those accepted into the Dental laboratory technology program.

**Associate in science degree**
Dental technology

**Certificate of achievement**
Dental technology

**Associate in science degree – Dental technology**
The associate in science program in dental technology prepares students to construct removable and fixed prosthetic appliances; construct and cast inlays, crowns, and bridges; and prepare ceramic jackets.

The program of classroom instruction and clinical experience, along with general education, leads to the associate degree in dental technology. To earn a degree, students must complete each of the courses required for the major with a “C” grade or better. Major requirements for dental technology courses are only available in the day. General education courses are available in the day or evening.

For an information sheet describing admission requirements, contact the Admissions Office.

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<td>Orientation, Ethics, Jurisprudence, and History of Dentistry</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DENTE 122</td>
<td>Introduction to Dental Materials</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DENTE 124</td>
<td>Introduction to Dental Morphology</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DENTE 236</td>
<td>Dental Anatomy and Morphology</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DENTE 237</td>
<td>Intermediate Crown and Bridge Techniques</td>
<td>2</td>
<td></td>
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<td>DENTE 238</td>
<td>Advanced Crown and Bridge Techniques</td>
<td>4</td>
<td></td>
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<tr>
<td>DENTE 240</td>
<td>Introduction to Dental Ceramics</td>
<td>2</td>
<td></td>
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<tr>
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<td>Dental Ceramics Substructure and Designs</td>
<td>4</td>
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<tr>
<td>DENTE 250</td>
<td>Practical Fixed and Removable Techniques</td>
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**Certificate of achievement - Dental technology**

This program prepares students to construct removable and fixed prosthetic appliances; construct and cast inlays, crowns, and bridges; and prepare ceramic jackets.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better. Most required courses are only available in the day. However, some recommended courses are available in the day or evening.

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<tr>
<td>COOP 170</td>
<td>Occupational Work Experience</td>
<td>1-4</td>
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<tr>
<td>DENTL 110</td>
<td>Overview of the Dental Profession</td>
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<tr>
<td>PHYSC 112</td>
<td>Fundamentals of Physical Science</td>
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Possible career opportunities

Upon completion of the dental technology program, students are eligible for the National Comprehensive Examination, which leads to certification sponsored by the National Board of Certified Dental Laboratories. Most graduates find job placements as technicians in dental labs.
For an information sheet describing admission requirements contact the Admissions Office.

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**Total units required:** 20

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**DENTE-120 Ethics, Jurisprudence and History of Dentistry**

1 unit LR
18 hours lecture per term
*Note: this course to be taken in the first semester*
Principles of ethics in the dental profession. History and jurisprudence of dental laboratory technology. CSU

**DENTE-122 Introduction to Dental Materials**

1 unit LR
18 hours lecture / 18 hours laboratory per term
*Note: this course to be taken in the first semester*
Introduction to the various metallic and nonmetallic materials used in dental laboratory practices. The development of the manipulative skill necessary for the proper use of the materials. CSU

**DENTE-124 Introduction to Dental Morphology**

2 units LR
18 hours lecture / 54 hours laboratory per term
*Note: this course to be taken in the first semester*
Introduction to anatomy of the head and oral cavity with emphasis on the individual teeth. Reproduction of the individual teeth in wax. CSU

**DENTE-150 Topics in Dental Technology**

.3-4 units LR
*May be repeated three times*
Variable hours
A supplemental course in Dental Technology to provide a study of current concepts and problems in Dental Technology and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

**DENTE-236 Dental Anatomy and Morphology**

2 units LR
18 hours lecture / 54 hours laboratory per term
*Note: this course to be taken in the first semester*
Instruction in dental anatomy and morphology; principles of occlusion and introduction to crown and bridge. CSU

**DENTE-237 Intermediate Crown and Bridge Techniques**

2 units LR
18 hours lecture / 54 hours laboratory per term
*Note: this course to be taken in the first semester*
The presentation of techniques necessary for the fabrication of fixed restorations including types of fixed restorations, prepared tooth forms, impressions, casts, dies, related occlusion, waxing of patterns, carving of patterns, investing of patterns, casting of patterns, and finishing of castings. CSU

**DENTE-238 Advanced Crown and Bridge Techniques**

4 units LR
36 hours lecture / 108 hours laboratory per term
Prerequisite: DENTE 122, DENTE 236, and DENTE 237, or equivalent
The presentation of techniques necessary for advanced fabrication of fixed and removable prosthetics including the development of single and multiple unit ceramic restorations in various combinations as well as the fabrication of restorations on natural cases. CSU

**DENTE-240 Introduction to Dental Ceramics**

2 units LR
18 hours lecture / 54 hours laboratory per term
*Note: this course to be taken in the first semester*
The techniques of manipulation for single units of porcelain bonded to metal including opaquer, building, firing, grinding, glazing, and staining. CSU

**DENTE-242 Dental Ceramics Substructure and Designs**

4 units LR
36 hours lecture / 108 hours laboratory per term
Prerequisite: DENTE 240 or equivalent
Continued advanced techniques of dental ceramics, including the fabrication of porcelain margins and characterized staining of ceramic porcelain restorations. CSU
DENT-250 Practical Fixed and Removable Techniques
2 units LR
18 hours lecture / 54 hours laboratory per term
Prerequisite: DENTE 124 or equivalent
This course is part of the total educational process that assists students in exploring and choosing a career, preparing for full-time employment and advancing in career specialty areas. The plan combines students skills applications, practical cases (real cases) prescriptions and case due dates, which are similar to those in commercial laboratories. This plan also prepares students for the transition from the community college setting into the commercial dental laboratory setting. CSU

DENT-252 Metal-Free Partial Techniques/Custom Provisional and Orthodontic Appliances
4 units SC
36 hours lecture / 108 hours laboratory per term
Recommended: DENTE 236 or equivalent and DENTL 174 or equivalent
Special instruction in the development of removable partial dentures, custom temporary restorations, Night Guards, Hawley retainers, stay plates and removable appliances designed for the oral cavity. CSU

DRAMA-112 Stage Makeup
2 units SC
May be repeated once
18 hours lecture / 54 hours laboratory per term
This course studies the aesthetics, materials, and procedures of stage makeup involving: latex and derma wax for witches and fairies, corrective and aging techniques, the creation of animals and monsters, and the construction of beards and mustaches. CAN DRAM 14, CSU, UC

DRAMA-113 Introduction to Costume Design
2.5 units SC
May be repeated once
18 hours lecture / 36 hours laboratory / 54 hours laboratory by arrangement per term
Theory and application of costume design and construction for the theater including fabric, basic patterns, wardrobe plotting, and historical styles. Working in crews for construction of costumes for theatrical productions. CSU, UC

DRAMA-111 Fundamentals of Stage Production – Lighting
3 units SC
54 hours lecture per term
Theory and techniques of stage lighting including the function of lighting equipment, the operation of basic dimmer systems, and the creation of light designs for selected plays. CAN DRAM 10, CSU, UC

DRAMA-123 Intermediate Principles of Acting
3 units SC
54 hours lecture per term
Recommended: DRAMA 122 or equivalent
This course is the continuation of the acting study sequence with focus on the synthesis of the actor’s internal and external techniques through physical and vocal action to realize the playwright’s concept. CAN DRAM 22, CSU, UC

DRAMA-124 Advanced Principles of Acting
6 units SC
108 hours lecture per term
Prerequisite: DRAMA 122 or equivalent and DRAMA 123 or equivalent; audition required
The study of acting with extensive participation in the performance of selected scenes from contemporary realism. A special emphasis will be on script analysis, personalization, improvisation, intensive listening and interaction modes with partners. This also includes the further study and application of physical and vocal gestures and dynamics. A special emphasis is an organic approach to acting. CSU, UC

DRAMA-126 Acting on Camera
3 units SC
36 hours lecture / 54 hours laboratory per term
Recommended: DRAMA 122 and 123 or equivalent
Practical training and practice in acting on camera for the performer. Close attention to those techniques of acting that have special application to television and film. CSU, UC
DRAMA-127 Auditioning Techniques
3 units SC
54 hours lecture per term
Recommended: DRAMA 122 or equivalent
The course will cover the elements of auditioning techniques that include, but are not limited to: monologue selection, styles, actor's preparation, research, theory and practical application. Students will learn to prepare for college, community and professional theater auditions and create a portfolio. CSU

DRAMA-130 Principles of Directing
3 units SC
54 hours lecture per term
Recommended: DRAMA 122 and 123 or equivalent; concurrent enrollment in DRAMA 230 or equivalent; eligibility for ENGL 122 or equivalent
Study and analysis of the stage director, his or her function, and the preparation of a play script from the first reading through casting, rehearsals, and performances. Emphasis will be placed on theory of directing as well as its practical application. CSU, UC

DRAMA-139 Introduction to Theater
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
A comprehensive examination of the multiple disciplines of theater and the collaboration process within. This introductory course surveys the roles of actors, directors, playwrights and designers (set, costume, sound and lighting). It will also cover the origins of theater, history, dramatic structure, the audience and theater performance spaces. CSU, UC

DRAMA-140 History of the Theater Before 1700
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course is a survey of the development of dramatic art from prehistoric time to 1700. It includes the exploration of experience, imagination and expression in dramatic art forms throughout the world. CSU, UC

DRAMA-141 History of the Theater from 1700 to the Present
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course is a survey of dramatic art from the 1700's to the present. It includes the exploration of experience, imagination, and expression in dramatic art forms throughout the world. CSU, UC

DRAMA-142 Multicultural Perspectives in American Theater
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
Students will explore and evaluate contemporary dramatic literature (1965-present) of Native American, African American, Asian-Pacific American, Asian American and Chicano/Latino cultures. They will also examine the historical as well as the cultural and social conditions in which these plays developed. CSU, UC

DRAMA-150 Children's Theater
3 units SC
May be repeated three times
54 hours lecture per term
This is a course in the theory and principles of children's theater. It features the creation of a production using an adult cast with emphasis upon performance for an audience of children. The production will tour local elementary schools. Each term new literature is studied. CSU

DRAMA-170 Introduction to Musical Theater
4 units SC
72 hours lecture per term
Recommended: MUSIC 170 or equivalent
This course develops audition and performance skills combining singing, dancing, and acting in the presentation of scenes, as well as the rehearsal and performance of dance routines from a variety of musicals. A survey of the history and development of musical theater is included. CSU, UC

DRAMA-180 Literature of World Drama
3 units SC
54 hours lecture per term
Survey of world dramatic literature from prehistoric time to 1700. Study of the text as a mirror to and creator of human thought and action. CSU, UC

DRAMA-181 Literature of World Drama
3 units SC
54 hours lecture per term
Survey of world dramatic literature from 1700 to the present. Study of the text as a mirror to and creator of human thought and action. CSU, UC

DRAMA-200 Introduction to Technical Theater
3 units SC
54 hours lecture per term
Co-requisite: DRAMA 201 or equivalent
Introduction to technical theater will provide students with a theoretical as well as a practical overview of the elements of technical theater. This would include the following: safety precautions, stage management, stage design, scenery, lighting, sound, acting, make-up, and costuming. Also included will be the discussion of job opportunities in theater. CSU, UC
DRAMA-201 Technical Theater Laboratory
1-2 units SC
May be repeated 3 times
Variable hours
Prerequisite: DRAMA 200 (may be taken concurrently)
Technical Theater laboratory will provide students with practical applications of technical theater. Students will obtain hands-on experience working on main stage productions, arena productions, and student-directed projects. They will assist in the following areas: safety precautions, stage management, stage design, scenery, lighting, sound, make-up, and costuming. CSU, UC

DRAMA-230 Directing Projects
1-2 units SC
May be repeated once
Variable hours
Recommended: concurrent enrollment in DRAMA 130 or equivalent; eligibility for ENGL 122 or equivalent
Practical application of Drama 130; preparation of script through performance, under rehearsal conditions of student-directed scenes in realistic style. Projects may culminate in limited public performance; intense development in student directed one-acts in varied theater styles for public performance; emphasis in the director-actor relationship and effective staging. May include original (not previously published) material. CSU, UC (credit limits may apply to UC - see counselor)

DRAMA-260 Acting in Student Directed Projects
1-2 units SC
May be repeated three times
Variable hours
Recommended: audition or equivalent
This is an open entry open exit class, where students receive practical experience in rehearsal and performance in student-directed scenes through performance under rehearsal conditions; rehearsal and performance in student directed one-acts in varied theater styles for public performance; rehearsal and performance in a short musical role; may be faculty or student directed. All projects culminate in public performance. CSU, UC (credit limits may apply to UC - see counselor)

DRAMA-270 Major Production: Acting Projects
1-2 units SC
May be repeated three times
Variable hours
Recommended: audition
Note: the student is limited to a maximum of 12 units in any combination of DRAMA 230, 260, and 270. Unit value depends on size of responsibility
Detailed study of a faculty-directed, sustained, nonmusical role with emphasis in rehearsal and performance. Includes script analysis, coordination of voice, movement, costume, makeup, and performance style. All projects culminate in public performance. CSU, UC (credit limits may apply to UC - see counselor)

DRAMA-290 Topics in Drama
1-3 units SC
May be repeated three times
Variable hours
Note: unit value depends on the number of theatrical experiences, amount of preparation, and evaluation required
Exploration of the relationships of experience, imagination, and expression in various theatrical forms. Analysis of theatrical art as a cultural force with focus on contemporary concerns. Study of the unique and collaborative contributions of creator, director, designer, and performer to a total theater art. Experiences may include attendance at local, national, or international productions. CSU, UC (credit limits may apply to UC - see counselor)

DRAMA-298 Independent Study
.5-3 units SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered
An opportunity for students to study interests under the direction of the faculty. CSU, UC (credit limits may apply to UC - see counselor)

Related courses in other departments
English 180 - Literature of the Drama
Physical Education Dance 134 - Pointe Ballet
Physical Education Dance 136 - Jazz Dance
Physical Education Dance 142 - Modern Dance
Speech 162 - Project in Oral Interpretation

Early childhood education – ECE

Social Science Division
Lyn Krause, Dean
Faculty Office 134
925-685-1230 x 2518

Possible career opportunities
Early childhood educators focus on children from zero to age five. Some of the positions held by early childhood professionals are: classroom aide, ECE teacher, site supervisor, program director, child care provider, adult educator of families and other professionals, resource and referral professional, social service worker, youth and family service worker, camp counselor, recreation leader, foster care provider, mental health paraprofessional, or child advocate.

Associate in science degree
Early childhood education

Certificates of achievement
Early childhood education - Basic
Early childhood education - Family daycare provider/foster care provider/in-home childcare provider
Certificate of completion
Early childhood education - Associate teacher

Certificate of achievement - Early childhood education - Basic
This certificate prepares students to meet the demands of today's childcare centers, preschool programs, and nursery schools. The certificate meets the California State Department of Social Services, Community Care Licensing, Title 22, and Division 12 requirements for a fully qualified teacher. The Early Childhood Education Basic Certificate is an alternative certificate to the California State Matrix and to the Child Development Certificate.

Associate in science degree - Early childhood education
The associate in science program in early childhood education is designed as a two-year curricular pathway that offers students a broad general education while integrating an in-depth study in child development and theory, principles and practices in early care and education. The early childhood education program prepares students for various careers working directly with children, families and other adults in the early childhood profession.

To earn a degree, students must complete each of the courses required for the major with a grade of “C” or better. Attending classes in the day, the evening or both can complete degree requirements.

general education requirements .................................................. 27-38

major requirements
ECE 124 Child Development and Psychology .......................... 3
ECE 125 Exploratory Experience with the Young Child ............ 3
ECE 126 Health, Safety and Nutrition for the Young Child ....... 3
ECE 128 Curriculum Development for Young Children ......... 3
ECE 130 Child, Family and Community ................................. 3
ECE 144 Diversity in ECE Classroom ..................................... 3
ECE 249 Introduction to ECE Theory and Practice ................. 4
ECE 250 ECE Theory and Practice .......................................... 4

Total units for the major .................................................... 26

electives
units from a selection of degree applicable courses ................. 0-7

Total units for the degree .................................................. 60-61

required courses
ECE 124 Child Development and Psychology .......................... 3
ECE 125 Introduction to Early Childhood Education .......... 3
ECE 126 Health, Safety and Nutrition for the Young Child .... 3
ECE 128 Curriculum Development for Young Children ....... 3
ECE 130 Child, Family and Community ................................. 3
ECE 144 Diversity in ECE Classroom ..................................... 3
ECE 249 Introduction to ECE Theory and Practice ................. 4
ECE 250 ECE Theory and Practice .......................................... 4

Total units required ......................................................... 26

*This is an alternative certificate to the Child Development Certificates.

Certificate of achievement - Early childhood education - Family day care provider/foster care provider/in-home child care provider
This program prepares students to become family day care providers and/or foster care providers and in-home child care providers. It anticipates legislative mandate of such training or licensure.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better. Attending classes in the day, the evening or both can complete certificate requirements.

required courses
ECE 124 Child Development and Psychology .......................... 3
ECE 126 Health, Safety and Nutrition for the Young Child .... 3
ECE 129 The Prosocial Curriculum: Dealing with Difficult and Aggressive Children ................................. 3
ECE 130 Child, Family and Community ................................. 3
ECE 134* Topics in Family Communication and Interaction .................................................. 0.3-4

plus at least 3 units from:
ECE 125 Introduction to Early Childhood Education .......... 3
ECE 128 Curriculum Development for Young Children .......... 3
ECE 144 Diversity in Early Childhood Classroom ................. 3
ECE 220 Programs for the School Age Child ......................... 3
ECE 230 Infant and Toddler Care ........................................... 3
ECE 269 Introduction to Young Children with Special Needs .................................................. 3

plus 2 units from:
ECE 245A Introduction to Day Care ...................................... 1
ECE 246 Introduction to Foster Parenting ............................. 1
ECE 247 Issues of Foster Parenting ....................................... 1

Total units required ......................................................... 20

*Three units are required for the certificate program.
The following certificates meet the education requirements for the Associate Teacher, Teacher, Master Teacher and Site Supervisor levels of the Child Development Permit Matrix issued by the State of California Commission on Teacher Credentialing. After meeting additional experience requirements, graduates are qualified to apply for a Child Development Permit, which is required to work in federal and state funded programs for children aged 0-5.

Certificate of achievement - Early childhood education - Master teacher
This certificate meets the education requirements for the Master Teacher level of the Child Development Permit Matrix issued by the State of California Commission on Teacher Credentialing. After meeting additional experience requirements, graduates are qualified to apply for a Child Development Permit, which is required to work in federal and state funded programs for children aged 0-5.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a "C" grade or better. Attending classes in the day, the evening or both can complete certificate requirements.

**required courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 124</td>
<td>Child Development and Psychology</td>
<td>3</td>
</tr>
<tr>
<td>ECE 125</td>
<td>Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 126</td>
<td>Health, Safety and Nutrition for the Young Child</td>
<td>3</td>
</tr>
<tr>
<td>ECE 128</td>
<td>Curriculum Development for Young Children</td>
<td>3</td>
</tr>
<tr>
<td>ECE 130</td>
<td>Child, Family and Community</td>
<td>3</td>
</tr>
<tr>
<td>ECE 144</td>
<td>Diversity in ECE Classroom</td>
<td>3</td>
</tr>
<tr>
<td>ECE 249</td>
<td>Introduction to ECE Theory and Practice</td>
<td>4</td>
</tr>
<tr>
<td>ECE 250</td>
<td>ECE Theory and Practice</td>
<td>4</td>
</tr>
<tr>
<td>ECE 253</td>
<td>Adult Supervision in EC Classrooms</td>
<td>2-3</td>
</tr>
</tbody>
</table>

plus at least six units in any one of these areas of concentration:

**Creative expression**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 237</td>
<td>Topics in Current Theory, Research and Implementation</td>
<td>0.5-3</td>
</tr>
<tr>
<td>ECE 242</td>
<td>Music for the Young Child</td>
<td>2</td>
</tr>
<tr>
<td>ECE 243</td>
<td>Creative Art for the Young Child</td>
<td>1</td>
</tr>
<tr>
<td>or one elective from</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 155, 160; PEDAN 129,130, 138, 139, 142; DRAMA 150; or MUSIC 101, 102, 120, 150, 151,171, or MUSLT 112</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Family day care/Foster care provider**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 245A</td>
<td>Introduction to Day Care</td>
<td>1</td>
</tr>
<tr>
<td>ECE 246</td>
<td>Introduction to Foster Parenting</td>
<td>1</td>
</tr>
<tr>
<td>ECE 247</td>
<td>Issues of Foster Parenting</td>
<td>1</td>
</tr>
</tbody>
</table>

**Infants and toddlers**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 230</td>
<td>Infant and Toddler Care</td>
<td>3</td>
</tr>
<tr>
<td>ECE 231</td>
<td>Infants and Toddlers: Issues and Applications</td>
<td>3</td>
</tr>
</tbody>
</table>

**Language and literature**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 177</td>
<td>Children's Literature</td>
<td>3</td>
</tr>
<tr>
<td>ECE 237</td>
<td>Topics in Current Theory, Research and Implementation</td>
<td>0.5-3</td>
</tr>
<tr>
<td>ECE 240</td>
<td>Language, Literacy, and Literature for the Young Child</td>
<td>3</td>
</tr>
<tr>
<td>L 111</td>
<td>Storytelling</td>
<td>2</td>
</tr>
</tbody>
</table>

**Science and math**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 127</td>
<td>Nutrition and the Young Child</td>
<td>1</td>
</tr>
<tr>
<td>ECE 237</td>
<td>Topics in Current Theory, Research and Implementation</td>
<td>0.5-3</td>
</tr>
<tr>
<td>ECE 241</td>
<td>Science and Mathematics for Early Childhood Education</td>
<td>3</td>
</tr>
</tbody>
</table>

(Note: Two ECE 237 courses in this category are required)

**Sign language**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIGN 265</td>
<td>Sign Language: SEE I</td>
<td>3</td>
</tr>
<tr>
<td>SIGN 267</td>
<td>Sign Language: SEE II</td>
<td>3</td>
</tr>
<tr>
<td>SIGN 268</td>
<td>Sign Language: SEE III</td>
<td>3</td>
</tr>
<tr>
<td>SIGN 280</td>
<td>American Sign Language (ASL) I</td>
<td>3</td>
</tr>
<tr>
<td>SIGN 281</td>
<td>American Sign Language (ASL) II</td>
<td>3</td>
</tr>
<tr>
<td>SIGN 282</td>
<td>American Sign Language (ASL) III</td>
<td>3</td>
</tr>
</tbody>
</table>

**Special needs**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 129</td>
<td>The Prosocial Curriculum: Dealing with</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Difficult and Aggressive Children</td>
<td></td>
</tr>
<tr>
<td>ECE 137</td>
<td>Issues of Separation and Loss with</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Children and Families</td>
<td></td>
</tr>
<tr>
<td>ECE 263</td>
<td>The Special Needs Child – Speech, Language and Hearing</td>
<td>1</td>
</tr>
<tr>
<td>ECE 265</td>
<td>Issues in Working with Young Children with Special Needs</td>
<td>2</td>
</tr>
<tr>
<td>ECE 269</td>
<td>Introduction to Young Children with Special Needs</td>
<td>3</td>
</tr>
</tbody>
</table>

Or any Sign Language course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIGN 266, 267, 268, 280, 281, or 282</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

plus at least 16 units from:

**general education courses**

(At least one course each from humanities, social science, science or math, and English)

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>ENGL 177</td>
<td>Children's Literature</td>
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<tr>
<td>ECE 237</td>
<td>Topics in Current Theory, Research and Implementation</td>
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<td>ECE 240</td>
<td>Language, Literacy, and Literature for the Young Child</td>
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</tr>
<tr>
<td>L 111</td>
<td>Storytelling</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total units required**

50-51

*Topics for ECE 237 vary. Please contact the Early Childhood Education Department to verify if a ECE 237 course meets the requirements for a particular area of specialization.*

Certificate of achievement - Early childhood education - Site supervisor
This certificate meets the education requirements for the Site Supervisor level of the Child Development Permit Matrix issued by the State of California Commission on Teacher Credentialing. After meeting additional experience requirements, graduates are qualified to apply for a Child Development Permit, which is required to work in federal and state funded programs for children aged 0-5.
To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a "C" grade or better. Attending classes in the day, the evening or both can complete certificate requirements.

**required courses** | units
---|---
The same courses as required for the Early Childhood Education Master Teacher Certificate | 50-51

**plus 3 units:**
- ECE 129 The Pro-social Curriculum: Dealing with Difficult and Aggressive Children | 3
- ECE 251 Administration and Supervision of Early Childhood Education Programs | 3
- ECE 252 Staff Development and Supervision for ECE Programs | 3

**Total units required** | 59-60

### Certificate of achievement - Early childhood education - Teacher

This certificate meet the education requirements for the Teacher level of the Child Development Permit Matrix issued by the State of California Commission on Teacher Credentialing. After meeting additional experience requirements, graduates are qualified to apply for a Child Development Permit, which is required to work in federal and state funded programs for children aged 0-5.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a "C" grade or better. Attending classes in the day, the evening or both can complete certificate requirements.

**required courses** | units
---|---
- ECE 124 Child Development and Psychology | 3
- ECE 125 Introduction to Early Childhood Education | 3
- ECE 128 Curriculum Development for Young Children | 3
- ECE 130 Child, Family and Community | 3

**plus at least 16 units from:**
- ECE 252 Staff Development and Supervision for ECE Programs | 3
- ECE 253 Introduction to ECE Theory and Practice | 4
- ECE 254 ECE Theory and Practice | 4

**Total units required** | 42

### Certificate of completion - Early childhood education - Associate teacher

This certificate meets the education requirements for the Associate Teacher level of the Child Development Permit Matrix issued by the State of California Commission on Teacher Credentialing. After meeting additional experience requirements, graduates are qualified to apply for a Child Development Permit, which is required to work in federal and state funded programs for children aged 0-5.

To earn a certificate of completion, students must complete each course used to meet a certificate requirement with a "C" grade or better. Attending classes in the day, the evening, or both can complete certificate requirements.

**required courses** | units
---|---
- ECE 124 Child Development and Psychology | 3
- ECE 125 Introduction to Early Childhood Education | 3
- ECE 128 Curriculum Development for Young Children | 3
- ECE 130 Child, Family and Community | 3

**Total units required** | 12

### ECE-124 Child Development and Psychology

3 units SC 54 hours lecture per term

**Recommended:** eligibility for ENGL 122 or equivalent

**Note:** Meets the State Department of Social Services Licensing requirement for DSS I Child/Human Growth and Development.

This course is a study of human development and behavior from conception through adolescence with emphasis on the principal theories and supporting data basic to understanding the physiological, social and psychological determinants of human behavior. CAN FCS 14, CSU, UC

### ECE-125 Introduction to Early Childhood Education

3 units SC 54 hours lecture per term

**Co-requisite:** ECE 124 or equivalent (may be taken prior to enrollment in ECE 125).

**Recommended:** eligibility for ENGL 122 or equivalent

**Note:** Meets the State Department of Social Services Licensing requirement for DSS III, Program and Curriculum Development

Specific training in observing, recording and evaluating the behavior of the preschool child. Includes history and philosophy of early childhood education. Orientation to careers working with children. Introduction to curriculum components with discussion on selecting and evaluating learning materials. Attention is given to the preparation of the basic curriculum areas of the child care center in the indoor and outdoor environment. CSU

### ECE-126 Health, Safety, and Nutrition for the Young Child

3 units SC 54 hours lecture per term

**Recommended:** eligibility for ENGL 122 or equivalent

**Note:** Meets the State Department of Social Services Licensing requirement for DSS VII, Health and Safety

This course is designed to provide knowledge of health, safety, and nutrition issues to child care providers in child care centers and preschool settings. Health concerns which affect young children and their care environments as well as sanitation, disease control, and basic first aid are covered. Knowledge about safety for the individual child and the design...
of a safe learning environment are emphasized. Planning and organizing nutritious food programs which integrate the food curriculum into the existing program and involve children in food preparation is stressed. CSU

**ECE-127 Nutrition and the Young Child**

1 unit CR/NC
18 hours lecture per term
Recommendation: eligibility for ENGL 116/118
Planning and organizing for a nutritious food program in the preschool setting using techniques and strategies for involving young children in all aspects of food preparation. Integration of the food curriculum with the program, discussion of current topics regarding health/safety precautions, awareness of nutrition needs of the young child and learning about the benefits of cooking with children. CSU

**ECE-128 Curriculum Development for Young Children**

3 units SC
54 hours lecture per term
Co-requisite: ECE 124 or equivalent (may be taken prior to enrollment in ECE 128).
Recommended: eligibility for ENGL 122 or equivalent
Note: meets the State Department of Social Services licensing requirement for DSS III, Program and Curriculum Development
This course will focus on new trends, approaches and techniques in early childhood education curriculum. It will acquaint students with various curriculum approaches and give them practice in applying such approaches in an ECE program. CSU

**ECE-129 The Prosocial Curriculum: Dealing with Difficult and Aggressive Children**

3 units SC
54 hours lecture per term
Co-requisite: ECE 124 or equivalent (may be taken prior to enrollment in ECE 129).
Recommended: eligibility for ENGL 122 or equivalent
Note: meets the State Department of Social Services licensing requirement for DSS III, Program and Curriculum Development
This course is designed to examine the reasons for children’s difficult and aggressive behaviors. Strategies for prevention and intervention in the classroom and home will be studied. CSU

**ECE-130 Child, Family, and Community**

3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
Note: meets the State Department of Social Services licensing requirement for DSS II, Child, Family, and Community
An introduction to the issues involved in early childhood education related to the entire learning environment of a child with emphasis on the family and community. Examination of the impact on a child of the variety of family systems including ethnic and subcultural variations. Study of community and society as it impacts the family and the child with an introduction to community resources available to support contemporary family life. CSU

**ECE-134 Topics in Family Communication and Interaction**

.3-.4 units SC
May be repeated three times
Variable hours
Recommended: eligibility for ENGL 116/118
Note: meets the State Department of Social Services licensing requirement for DSS III, Program and Curriculum Development
A supplemental course in family communication and interaction to examine establishing a home and family, raising children in positive and effective ways and adjusting to parents’ role such as single parents, working parents, step-parents and foster child care parents. Specific topics will be announced in the schedule of courses. CSU

**ECE-137 Issues of Separation and Loss with Children and Families**

3 units SC
54 hours lecture per term
Recommended: ECE 124 or equivalent; eligibility for ENGL 122 or equivalent
Review of major theories related to separations, loss, and their implications in working with young children. Cultural customs are explored along with resources that are available for teaching children about separation and loss. CSU

**ECE-144 Diversity in Early Childhood Education Classrooms**

3 units SC
54 hours lecture per term
Co-requisite: ECE 124 or equivalent
Recommended: eligibility for ENGL 122 or equivalent
Note: meets the State Department of Social Services licensing requirements for DSS III, Program and Curriculum Development
This course is designed to evaluate biases with regard to race, gender, culture, disability, class, and age within the early childhood setting and to provide age appropriate curriculum ideas, activities, and materials which would help to eliminate these biases. CSU

**ECE-150 Topics in Child Development**

1-3 units CR/NC
May be repeated three times
Variable hours
Note: TB clearance required for any laboratory work.
Participation in Development at Children’s Center laboratory School from 3 to 6 hours per week is required for 2 or 3 units. One unit: lecture only. Two units: lecture plus three laboratory hours per week. Three units: lecture plus six laboratory hours per week. Required of parents whose children are enrolled in Developmental Children’s Center.
A supplemental course in child development to provide a study of current concepts and problems in child development related subdivisions. Specific topics will be announced in the schedule of courses. CSU
ECE-151  Topics in Cognitive Development
1-3 units  CR/NC
May be repeated three times
Variable hours
Note: TB clearance required for any laboratory work.
Participation in Developmental Children's Center laboratory school from 3 to 6 hours per week is required for 2 or 3 units.
One unit: lecture only. Two units: lecture plus three laboratory hours per week. Three units: lecture plus six laboratory hours per week. Required of parents whose children are enrolled in Developmental Children's Center.
A supplemental course in cognitive development to provide a study of current concepts and problems in cognitive development-related subdivisions. Specific topics will be announced in the schedule of courses. CSU

ECE-152  Topics in Physical Development
1-3 units  CR/NC
May be repeated three times
Variable hours
Note: TB clearance required for any laboratory work.
Participation in Developmental Children's Center laboratory school from 3 to 6 hours per week is required for 2 or 3 units.
One unit: lecture only. Two units: lecture plus three laboratory hours per week. Three units: lecture plus six laboratory hours per week. Required of parents whose children are enrolled in Developmental Children's Center.
A supplemental course in physical development in the child through age six to provide a study of current concepts and problems in physical development and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

ECE-153  Topics in the Role of Play in Development
1-3 units  CR/NC
May be repeated three times
Variable hours
Note: TB clearance required for any laboratory work.
Participation in Developmental Children's Center laboratory school from 3 to 6 hours per week is required for 2 or 3 units.
One unit: lecture only. Two units: lecture plus three laboratory hours per week. Three units: lecture plus six laboratory hours per week. Required of parents whose children are enrolled in Developmental Children's Center.
A supplemental course in the role of play in development to provide a study of current concepts and problems in play development-related subdivisions. Specific topics will be announced in the schedule of courses. CSU

ECE-154  Topics in Personality Development
1-3 units  CR/NC
May be repeated three times
Variable hours
Note: TB clearance required for any laboratory work.
Participation in Developmental Children's Center laboratory school from 3 to 6 hours per week is required for 2 or 3 units.
One unit: lecture only. Two units: lecture plus three laboratory hours per week. Three units: lecture plus six laboratory hours per week. Required of parents whose children are enrolled in Developmental Children's Center.
A supplemental course in personality development to provide a study of current concepts and problems in personality development-related subdivisions. Specific topics will be announced in the schedule of courses. CSU

ECE-155  Topics in Child Behavior
1-3 units  CR/NC
May be repeated three times
Variable hours
Note: TB clearance required for any laboratory work.
Participation in Developmental Children's Center laboratory school from 3 to 6 hours per week is required for 2 or 3 units.
One unit: lecture only. Two units: lecture plus three laboratory hours per week. Three units: lecture plus six laboratory hours per week. Required of parents whose children are enrolled in Developmental Children's Center.
A supplemental course in child behavior to provide a study of current concepts and problems in behavior-related subdivisions. Specific topics will be announced in the schedule of courses. CSU

ECE-156  Topics for Caregivers of Children in Out-of-Home Placement 0-5 Years
.3-.4 units  SC
May be repeated three times
Variable hours
This supplemental course in Foster Care Education of children aged 0-5 to provide a study of current concepts and problems in Foster Care and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

ECE-157  Topics for Caregivers of Children in Out-of-Home Placement 6-11 Years
.3-.4 units  SC
May be repeated three times
Variable hours
This supplemental course in Foster Care Education of children aged 6-11 years to provide a study of current concepts and problems in Foster Care and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

ECE-158  Topics for Caregivers of Children in Out-of-Home Placement 12-18 Years
.3-.4 units  SC
May be repeated three times
Variable hours
This supplemental course in Foster Care Education of children aged 12-18 years to provide a study of current concepts and problems in Foster Care and related subdivisions. Specific topics will be announced in the schedule of courses. CSU
## ECE-220 Programs for the School Age Child
3 units SC  
54 hours lecture per term  
Prerequisite: ECE 124  
Recommended: eligibility for ENGL 122 or equivalent

An overview of the developmental tasks and needs of the child between the ages of six and twelve. Fundamentals of planning, implementing, and evaluating programs for the school-aged child. Special consideration will be given to working with schools, community, and parents. CSU

## ECE-230 Infant and Toddler Care
3 units SC  
54 hours lecture per term  
Prerequisite: ECE 124 or equivalent  
Recommended: eligibility for ENGL 122 or equivalent  
Note: meets the State Department of Social Services licensing requirement for DSS IV, Infant Care and Development

Review of the developmental issues of infants and toddlers. Study of the basic components of the infant-toddler curriculum including methods of assessing child readiness, care giving and teaching strategies, environmental settings, selecting activity programs, and working with parents. Observations of infants and toddlers, learning environments, and caregiving strategies will be included. CSU

## ECE-231 Infant and Toddlers: Issues and Application
3 units SC  
54 hours lecture per term  
Prerequisite: ECE 124  
Recommended: eligibility for ENGL 122

This course is designed to review current infant and toddler child development issues and discuss application and implementation in caregiving and learning environments. CSU

## ECE-237 Early Childhood Education: Current Theory, Research, and Implementation
.5-3 units SC  
Variable hours  
Prerequisite: ECE 124 or equivalent  
Recommended: eligibility for ENGL 122 or equivalent  
Note: meets the State Department of Social Services licensing requirement for DSS III, Program and Curriculum Development

A supplemental course in child development to provide a study of current concepts and problems in the major theories of child development including their philosophical bases, their techniques and their materials and related subdivisions. Specific topics will be announced in the schedule. CSU

## ECE-240 Language, Literacy and Literature for the Young Child
3 units SC  
54 hours lecture per term  
Recommended: eligibility for ENGL 122 or equivalent

An introduction to young children’s literature, emergent literacy and to the development of speech and language during infancy and early childhood. Students will explore teaching techniques, which promote language, literacy and literature for the young child. Approaches to reading books, storytelling, story writing, etc. will be introduced and practiced. CSU

## ECE-241 Science and Mathematics for Early Childhood Education
3 units SC  
54 hours lecture per term  
Recommended: eligibility for ENGL 122  
Note: meets the State Department of Social Services licensing requirement for DSS III, Program and Curriculum Development

Survey of the materials in science, nature, and mathematics fields suitable to teach young children. Training in materials, techniques, demonstrations and experiments which enable the teacher to arrange a learning environment. Special focus on concept-based, inquiry-oriented approaches. CSU

## ECE-242 Music for the Young Child
2 units SC  
36 hours lecture per term  
Recommended: eligibility for ENGL 122 or equivalent  
Note: meets the State Department of Social Services licensing requirement for DSS III, Program and Curriculum Development

Exploration of media and techniques which enable the teacher to plan, conduct, and evaluate music and movement activities for the young child. Experiences in the integration of music, movement, and language as related to conceptual and sensory motor development. CSU

## ECE-243 Creative Art for the Young Child
1 unit SC  
18 hours lecture per term  
Recommended: eligibility for ENGL 122 or equivalent  
Note: meets the State Department of Social Services licensing requirement for DSS III, Program and Curriculum Development

A study of the developmental stages of children’s artistic expression. Includes an exploration of creative art activities along with developing and implementing a creative arts curriculum for the young child. CSU

## ECE-244 Circle Time Activities
1 unit SC  
18 hours lecture per term  
Recommended: eligibility for ENGL 122 or equivalent  
Note: meets the State Department of Social Services licensing requirement for DSS III, Program and Curriculum Development

This course is designed to present the value of circle or group time for young children. Written materials, demonstrations, lecture and discussions, and sharing of student experiences are utilized to teach practical and theoretical application of songs, stories, games, finger plays and other circle time activities. CSU
ECE-245A  Introduction to Day Care
1 unit  CR/NC
18 hours lecture per term
Recommended: eligibility for ENGL 122
A topical course designed to expand day care providers general knowledge of child development, classroom management, enriched early childhood activities, and signals which alert the provider to a child's special needs. CSU

ECE-246  Introduction to Foster Parenting
1 unit  CR/NC
18 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
Designed primarily for new foster parents. Describes the role of social service agency, the special needs of children in foster care, and the skills helpful for foster parents. CSU

ECE-247  Issues of Foster Parenting
1 unit  CR/NC
18 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
Designed for both new and experienced foster parents. Addresses in considerable depth some of the most basic issues faced by foster parents. Offers clarification of these issues and options for dealing with them. CSU

ECE-249  Introduction to Early Childhood Education Theory and Practice
4 units  SC
36 hours lecture / 108 hours laboratory per term and
Prerequisite: ECE 124 or equivalent and ECE 125 or equivalent (may be taken concurrently)
Recommended: eligibility for ENGL 122 or equivalent
Notes: TB clearance for students participating in laboratory work. Meets the State Department of Social Services licensing requirement for DSS III, Program and Curriculum Development
An introductory practicum study of curriculum methods and materials used in early childhood education. Focus is on practical application of early childhood education theories in a laboratory setting with infants, toddlers and young preschool children. Topics include developmentally appropriate practice, health and safety issues, credentialing, and licensing requirements, professional code of ethics, and guiding children's behavior. CSU

ECE-250  Early Childhood Education Theory and Practice
4 units  SC
36 hours lecture / 108 hours laboratory per term
Co-requisite: ECE 124 or equivalent and ECE 125 or equivalent, ECE 249 or equivalent (may be taken concurrently)
Recommended: eligibility for ENGL 122 or equivalent
Note: required TB clearance for students participating in laboratory work. Meets the State department of Social Services licensing requirement for DSS III, Program and Curriculum Development
A study of Emergent Curriculum, the Project Approach and the Developmentally Appropriate curriculum methods and materials to be used in early childhood education. Includes supervised teaching experience in a preschool laboratory setting provides some understanding of and experience in assisting in various types of child care centers. Special focus on children's language skills, cognitive development and creative expression. CSU

ECE-251  Administration and Supervision of Early Childhood Education Programs
3 units  SC
54 hours lecture per term
Prerequisite: ECE 124, 125, 250 or equivalent
Note: meets the State Department of Social Services licensing requirement for DSS VI, Supervision and Administration
Provides study and understanding of administrative procedures and principles of supervision, management, and evaluation used in early childhood programs, with focus on practical application of theory. CSU

ECE-252  Staff Development and Supervision for Early Childhood Programs
3 units  SC
54 hours lecture per term
Recommended: ECE 251; eligibility for ENGL 122
Note: meets the State Department of Social Services licensing requirement for DSS VI, Supervision and Administration
Exploration of supervisory theory, organizational dynamics, and staff development as they relate to early childhood education. Focus on the development of supervisory style and management techniques to maximize staff motivation and teacher effectiveness. CSU

ECE-253  Adult Supervision in Early Childhood Classrooms
2-3 units  SC
Variable hours
Recommended: ECE 124, 125, 130 and 250 or equivalent eligibility for ENGL 122 or equivalent
Note: TB Clearance required for students participating in laboratory work
This course is a study of the methods and principles of supervising student teachers, assistant teachers, parents and volunteers in early childhood education/development classrooms. Emphasis is on the role of classroom teachers who function as mentors to new teachers while simultaneously addressing the needs of children, parents, and other staff. CSU

ECE-256  The Special Needs Child: Speech, Language and Hearing Development
1 unit  SC
18 hours lecture per term
Recommended: ECE 124; eligibility for ENGL 122 or equivalent
Study of speech and language development and its meaning for working with children with special needs. Introduction to speech and language remediation. Techniques for working with children who have speech and language problems. CSU
Early childhood education

ECE-265  Issues in Working with Young Children with Special Needs
2 units  SC
36 hours lecture per term
Recommended: ECE 124; eligibility for ENGL 122 or equivalent
An in-depth exploration of the issues of working and/or living with children with special needs. Focus will be on various types of disabling conditions included in early care and education settings, evaluating the physical environment of typical educational settings, strategies for inclusion, managing challenging behaviors, curriculum development, and working with parents and other agencies. CSU

ECE-269  Introduction to Young Children with Special Needs
3 units  SC
54 hours lecture per term
Recommended: ECE 124 and eligibility for ENGL 122
Theory, methods and materials to understand and work with young children with special needs. Examination of legal mandates, service delivery models and various disabling conditions. Identification and assessment for program planning will be addressed. CSU

ECE-298  Independent Study
.5-.3 units  SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered.
An opportunity for students to pursue special interests under direction of the family life education faculty. CSU

Economics – ECON

Social Science Division
Lyn Krause, Dean
Faculty Office 134
925-685-1230 x 2518

Possible career opportunities
Economics is a basic component for a career in management, sales, banking, health care industry, utility industry, consulting, statistical analysis, finance, and Foreign Service. Most career options require more than two years of college study.

ECON-101  Economics of Public Issues
3 units  SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
Examination of the economic aspects of selected current public issues such as price controls, crime, education, poverty, pollution, international trade, and taxes. Analyzes the role of economics as a social science in understanding causes of, and policies for dealing with, current public issues. CSU, UC (credit limits may apply to UC - see counselor)

ECON-200  Introduction to Economics
3 units  SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
Note: business and economics majors should take ECON 220 and ECON 221
This course surveys the basic principles of economics, including both microeconomics and macroeconomics. Students are introduced to concepts such as market demand and supply, market structures, resource markets, business cycles, fiscal policy, the Federal Reserve System, and international trade. CSU, UC (credit limits may apply to UC - see counselor)

ECON-220  Principles of Macroeconomics
3 units  SC
54 hours lecture per term
Prerequisite: MATH 110 or equivalent or one year of high school algebra or equivalent
Recommended: eligibility for ENGL 122
This is the first semester of a two-semester sequence in economics. Students are introduced to fundamental economic principles that recur throughout economics such as scarcity, opportunity cost, marginal decision making and the gains from trade. Macroeconomics focuses on broad economic aggregates such as total output, employment, the price level and the rate of economic growth. The course also examines fiscal and monetary policies and institutions, and finally, applies macroeconomic theories to current economic issues. CAN ECON 2, CSU, UC (credit limits may apply to UC - see counselor)

ECON-221  Principles of Microeconomics
3 units  SC
54 hours lecture per term
Prerequisite: MATH 110 or equivalent or one year of high school algebra or equivalent
Recommended: ECON 220; eligibility for ENGL 122
This is the second semester of a two-semester sequence. Microeconomics focuses on the study of choices made by economic agents, namely, the consumers, resource owners, firms and government and how these decisions affect the market for a particular good or service. Typical topics include a more detailed study of the market mechanism, and the elasticity properties. CAN ECON 4, CSU, UC (credit limits may apply to UC - see counselor)

ECON-298  Independent Study
.5-.3 units  SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered.
An opportunity for students to study special interests under the direction of the faculty. CSU, UC (credit limits may apply to UC - see counselor)
Possible career opportunities
There are two types of credentials for teaching in the public schools in California. One type is the Multiple Subjects Credential for teachers in a self-contained classroom, which generally means teaching in grades K-6 or K-8. The other is the Single Subject Credential for teachers responsible for only one subject, which in general is preparation for teaching high school (grades 9-12). Both career options require an advanced degree.

Preparation for teaching may be useful for students who also wish to pursue careers in human resources, counseling, communication studies, recreation administration, social welfare, and corporate training.

EDUC-120 Teaching as a Profession
3 units LR
36 hours lecture / 54 hours laboratory per term
The course invites the student to explore teaching as a profession. Effective teaching, experiences and expectations of a teacher, foundations of teaching, critical issues in education, student diversity and job options are emphasized. Students are required to complete 54 hours of field observation and field work. This course is designed for students considering teaching as a profession, and for parents of children in the American school system who want to be informed of current issues and practices in education. CSU, UC

EDUC-122 Introduction to Reading Development and Interventions for K-3
3 units LR
36 hours lecture / 54 hours laboratory per term
This course introduces students to the practice and theory of reading intervention in grades Kindergarten to 3. Students will be exposed to the developmental stages of language acquisition and literacy. Students will acquire a working vocabulary of pertinent terms and strategies appropriate to enhance the literacy of primary-age students. Fieldwork in designated schools is a key component of this course. Students will be expected to research a topic related to reading and report findings to the class. CSU

ELECT-120 Direct Current Circuits
4 units LR
54 hours lecture / 54 hours laboratory per term
Basic direct current (DC) theory covering Ohm’s Law, series circuits, parallel circuits, series-parallel circuits, basic residential wiring and ladder logic. Also includes related laboratory experience. CSU

ELECT-121 Alternating Current Circuits
4 units LR
54 hours lecture / 54 hours laboratory per term
Recommended: ELECT 120 or equivalent
An in-depth study of alternating current (AC) circuits involving capacitance and inductance. Topics include RL, RC, RLC, and resonant circuits. The course covers three phase circuits, and computer simulations of circuits. Also includes related laboratory experience. CSU

ELECT-150 Topics in Electricity
3-4 units SC
May be repeated three times
Variable hours
Recommended: TBA
A supplemental course in Electricity designed to provide a study of the current developments in the field and related subdivisions. Specific topics to be announced. CSU

ELECT-266 Electrical Codes
3 units SC
May be repeated once
54 hours lecture per term
Recommended: CONST 170 or equivalent
Interpretation of the National Electrical Code and State Safety Orders, instruction in drawing, reading, and use of electrical diagrams and schematics.

ELECT-267 Electrical Codes
3 units SC
May be repeated once
54 hours lecture per term
Recommended: CONST 170 or equivalent
Interpretation of the National Electrical Code and State Safety Orders, instruction in drawing, reading, and use of electrical diagrams and schematics.
Possible career opportunities
The types of jobs and careers involving electronics include: medical, industrial, and commercial electronics; computers; consumer products; radio and television; instrumentation; communications; automotive and others.

Certificate of achievement – Electronics technology
This program prepares students for jobs installing, repairing, maintaining and servicing electronic equipment. Electronics jobs are found in the fields of medical, industrial, commercial, computers, consumer products, radio and television, instrumentation, communications, automotive and others.

Selected courses may meet some of the lower division requirements for bachelor of science programs in engineering technology and industrial technology at certain California State University campuses and private technical colleges. Consult with electronics department faculty and college counselors for more information.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better and maintain an overall GPA of 2.5 or better in the coursework required for the certificate.

required courses
COMTC 110B Introduction to Computer Hardware/Software .............................................. 4
ELTRN 101A DC Circuits ................................................................. 4
ELTRN 101B AC Circuits ................................................................. 4
ELTRN 102B Linear Circuits .............................................................. 4
ELTRN 140 Electronics Fabrication ..................................................... 2
ELTRN 271 Programmable Logic Controllers .............................................. 4

Total units required 22

Recommended course
COMTC 115 A+ Exam Preparation ...................................................... 2

ELTRN-101A DC Circuits
4 units LR
54 hours lecture / 54 hours laboratory per term
Recommended: ELTRN 101A or equivalent
Basic direct current (DC) theory covering Ohm’s Law, series circuits, parallel circuits, series-parallel circuits, basic residential wiring and ladder logic. Also includes related laboratory experience, including use of software to simulate electrical circuits. CSU

ELTRN-101B AC Circuits
4 units LR
54 hours lecture / 54 hours laboratory per term
Recommended: ELTRN 101A or equivalent
An in-depth study of alternating current (AC) circuits involving capacitance and inductance. Topics include RL, RC, RLC and resonant circuits. The course covers 3-phase circuits, computer-simulated circuits, and related laboratory experience. CSU

ELTRN-102B Linear Circuits
4 units LR
54 hours lecture / 54 hours laboratory per term
Recommended: ELTRN 101B or equivalent
A study of operational amplifiers, timers, phase-locked loops, and other active devices. Includes analysis and design of basic circuits such as active filters and analog communication circuits. Also includes related laboratory experience. CSU

ELTRN-107 Introduction to Robotics
1 unit SC
May be repeated once
27 hours lecture / 27 hours laboratory per term
Recommended: ELTRN 101A or equivalent (may be taken concurrently)
A study of programmable controllers which have input devices such as infrared, ultrasonic, pressure sensors and output devices such as motors, servos, stepping motors, lights, relays, solenoids, and switching circuits. Students will be introduced to the languages for programming the programmable controllers. Pneumatics and hydraulics circuits will also be included in the course. CSU

ELTRN-116 Introduction to Electronics
2-4 units SC
Variable hours
Recommended: ELTRN 101A or equivalent (may be taken concurrently)
A survey of the general aspects of electronics, including a study of the basic principles, components, and techniques employed. Includes work with electronic test equipment. This course is intended for persons contemplating entering the field as well as those in related fields that use electronics as a tool. CSU

ELTRN-140 Electronics Fabrication
2 units LR
May be repeated once
27 hours lecture / 27 hours laboratory per term
Recommended: ELTRN 101A or equivalent (may be taken concurrently)
A study of electronics drafting, printed board design, and the development and construction of an electronic project. CSU

ELTRN-150 Topics in Electronics
3-4 units SC
May be repeated three times
Variable hours
A supplemental course in electronics to provide a study of current concepts and problems in electronics and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

ELTRN-201A Digital Circuits
4 units LR
54 hours lecture / 54 hours laboratory per term
Recommended: ELTRN 101A or equivalent
A study of fundamental concepts of pulse and digital circuits, including related laboratory experience. This course covers number systems, gates, combination logic circuits, sequential logic circuits, interface circuits, data transmission, and microprocessors. Computer simulations are included in the laboratory. CSU
ELTRN-271 Programmable Logic Controllers
4 units LR
54 hours lecture / 54 hours laboratory per term
Recommended: ELTRN 101A or equivalent
This course will cover programmable logic controller equipment, hardware, and programming. The topics include system descriptions, internal and input/output operations, installation and testing, troubleshooting and maintenance, ladder diagrams, programming of counters, timers, and inputs/outputs, and other programming commands. CSU

Engineering and engineering technology

Possible career opportunities
The engineering transfer program prepares students to enter four-year engineering schools as juniors. Upon completion of the B.S., students can become electrical, civil, mechanical, chemical, materials, aerospace or industrial engineers.

Career options in engineering technology include civil engineering technicians, surveying and mapping technicians (cartography), architectural and civil drafters, and mechanical engineering technicians. Engineering technicians may work as computer-aided design drafters, engineering aides, land surveyors, field assistants, planning technicians and technical sales people.

Associate in science degrees
Civil design drafting technology
Mechanical design drafting technology

Certificates of achievement
Civil design drafting technology
Civil drafting – CAD
Mechanical design drafting technology
Mechanical drafting – CAD

Certificate of completion
Drafting with CAD

Associate in science degree - Mechanical design drafting technology
The associate in science degree in mechanical design drafting technology provides students with the technical and analytical skills needed for employment in the field of mechanical engineering drafting. Through both academic and laboratory study students gain the practical skills needed for entry into the job market. Drafters prepare, interpret, and revise technical drawings using computer-aided-drafting (CAD) and may gather and categorize field data.

To earn the degree, students must complete each course used to meet a major requirement with a “C” grade or better. Students who wish to transfer should consult with program faculty and college counselors to insure that the requirements for transfer to appropriate institutions are met. Certain courses may satisfy both a major and a DVC general education requirement; however the units are only counted once.

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<tr>
<th>Units</th>
<th>General education requirements</th>
<th>27-38 units</th>
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<td>major requirements</td>
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<tr>
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<td>CONST 114 Blueprint Reading</td>
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<td>ENGIN 121 Engineering Drawing</td>
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<td>ENGIN 126 Computer-Aided Design and Drafting: AutoCAD</td>
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<td>ENGIN 226 Computer-Aided Design Drafting, Advanced Concepts – AutoCAD</td>
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<td>GEOG 127 Introduction to Global Positioning Systems</td>
<td>3</td>
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<td>PHYS 110 Elementary Physics</td>
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plus at least 2 units from:
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<tr>
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<tr>
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plus at least 3 units from:
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<td>ENGIN 223 Principles of Pipe Drafting</td>
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<td></td>
<td>ENGIN 298 Independent Studies</td>
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plus at least 3 units from:
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<th>Units</th>
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<td>GEOG 160 Introduction to Remote Sensing</td>
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<tr>
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<td>GEOG 162 Maps and Cartography</td>
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Total units for the major 33-36

Total units for the degree 60-74

Electives
units from a selection of degree applicable courses 0-7

Associate in science degree - Civil design drafting technology
The associate in science degree in civil design drafting technology provides students with the technical and analytical skills needed for employment in the field of civil or structural engineering drafting. Through both academic and laboratory study students gain the practical skills needed for entry into the job market. For example, civil drafters may work on plans for major construction projects such as dams, roads, bridges, and sewage systems; or prepare, interpret and revise topographic and/or relief maps using computer-aided-drafting (CAD).

To earn the degree, students must complete each course used to meet a major requirement with a “C” grade or better. Students who wish to transfer should consult with program faculty and college counselors to insure that the requirements for transfer to appropriate institutions are met. Certain courses may...
Engineering and engineering technology

satisfy both a major and a DVC general education requirement; however the units are only counted once.

general education requirements ..........................................................27-38

major requirements

CHEM 108 Introductory Chemistry ..................................................4
ENGIN 120 Engineering Drawing .....................................................3
ENGIN 122 Principles of Mechanical Drafting ...............................3
ENGIN 126 Computer Aided Design and Drafting: AutoCAD ..................................................4
ENGIN 226 Computer Aided Drafting Design, Advanced Concepts-AutoCAD ..................................................4
CONST 114 Surveying Related to Construction ..................................2
CONST 116 Blueprint Reading .........................................................2
ENGIN 111 Mathematics for Technicians ......................................4
MATH 121* Plane Trigonometry ....................................................3

plus at least 3 units from:

ENGIN 222 Principles of Structural Steel Drafting ...........................3
ENGIN 223 Principles of Pipe Drafting ...........................................3
ENGIN 298 Independent Studies ....................................................0.5-3
PHYS 110 Elementary Physics .........................................................3

plus at least 3 units from:

ENGIN 111 Mathematics for Technicians ......................................4
GEOG 128 Advanced Global Positioning Systems .........................3
GEOG 160* Introduction to Remote Sensing ..................................4
PHYS 110 Elementary Physics .........................................................3

Electives

units from a selection of degree applicable courses ..........................0-7

Total units for the degree .........................................................60-75

Certificate of achievement - Civil design drafting technology

This certificate program prepares students for an entry level job as a civil drafter. Drafters work under the supervision of civil or structural engineers, architects, and/or surveyors as support staff in jobs requiring them to prepare, interpret, and revise technical drawings, or gather and categorize field data. Engineering technicians work as support staff in field, laboratory and/or office environments.

To earn a certificate of achievement, students must complete each of the required courses with a “C” grade or better. Some courses are not offered every semester so please consult with the program director for assistance in scheduling classes.

required courses

units

ENGIN 111 Mathematics for Technicians ......................................4
PHYS 110 Elementary Physics .........................................................3

plus at least 2 units from:

ENGIN 140 Plane Surveying ..........................................................3

plus at least 3 units from:

ENGIN 111 Mathematics for Technicians ......................................4
MATH 121* Plane Trigonometry ....................................................3

plus at least 3 units from:

ENGIN 222 Principles of Structural Steel Drafting ...........................3
ENGIN 223 Principles of Pipe Drafting ...........................................3
ENGIN 298 Independent Studies ....................................................0.5-3

plus at least 3 units from:

GEOG 160* Introduction to Remote Sensing ..................................4
PHYS 110 Elementary Physics .........................................................3

Total units required 33-36

*Certain courses required for this certificate have recommended prerequisite coursework that could add additional units.

Certificate of achievement - Mechanical design drafting technology

This certificate program prepares students for an entry level job as a mechanical drafter. Drafters work under the supervision of project engineers, senior designers and machinists to prepare, interpret and revise technical drawings using computer-aided drafting (CAD) methods. Engineering technicians work as support staff in field, laboratory and/or office environments.

required courses

units

ENGIN 111 Mathematics for Technicians ......................................4
PHYS 110 Elementary Physics .........................................................3

plus at least 3 units from:

ENGIN 111 Mathematics for Technicians ......................................4
MATH 121* Plane Trigonometry ....................................................3

plus at least 3 units from:

ENGIN 222 Principles of Structural Steel Drafting ...........................3
ENGIN 223 Principles of Pipe Drafting ...........................................3
ENGIN 298 Independent Studies ....................................................0.5-3

plus at least 3 units from:

PHYS 110 Elementary Physics .........................................................3

Total units required 24-25

*Certain courses required for this certificate have recommended prerequisite coursework that could add additional units.

Certificate of achievement - Mechanical design drafting technology

This certificate program prepares students for an entry level job as a mechanical drafter. Drafters work under the supervision of project engineers, senior designers and machinists to prepare, interpret and revise technical drawings using computer-aided drafting (CAD) methods. Engineering technicians work as support staff in field, laboratory and/or office environments.
To earn a certificate of achievement, students must complete each of the required courses with a "C" grade or better. Some courses are not offered every semester so please consult with the program director for assistance in scheduling classes.

### Certificate of achievement - Mechanical drafting, CAD

This certificate program prepares students for further study or an entry level training position in jobs requiring them to prepare and revise technical drawings used in mechanical engineering, machining and/or manufacturing.

To earn a certificate of achievement, students must complete each of the required courses with a "C" grade or better. Some courses are not offered every semester so please consult with the program director for assistance in scheduling classes.

#### Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 108</td>
<td>Introductory Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>ENGIN 120*</td>
<td>Engineering Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ENGIN 122</td>
<td>Principles of Mechanical Drafting</td>
<td>3</td>
</tr>
<tr>
<td>ENGIN 126</td>
<td>Computer-Aided Design and Drafting — AutoCAD</td>
<td>4</td>
</tr>
<tr>
<td>ENGIN 226</td>
<td>Computer-Aided Drafting Design, Advanced Concepts — AutoCAD</td>
<td>4</td>
</tr>
<tr>
<td>MATEC 120</td>
<td>Introduction to Machine Technology</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 110</td>
<td>Elementary Physics</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus at least 3 units from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGIN 111</td>
<td>Mathematics for Technicians</td>
<td>4</td>
</tr>
<tr>
<td>MATH 121*</td>
<td>Plane Trigonometry</td>
<td>3</td>
</tr>
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</table>

Plus at least 3 units from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGIN 239*</td>
<td>Statics and Strengths of Materials</td>
<td>4</td>
</tr>
<tr>
<td>MATEC 121</td>
<td>Machine Processes II</td>
<td>3</td>
</tr>
<tr>
<td>MATEC 222</td>
<td>Introduction to Computer Numerical Control</td>
<td>3</td>
</tr>
</tbody>
</table>

### Certificate of completion - Drafting with CAD

This certificate program is coursework which may lead to completion of higher unit certificates or an associate in science degree in the subject area.

Drafters make drawings and plans to specify dimensions, materials and processes used in the making of a final product. These drawings are guidelines for the workers who will actually build or make whatever is being produced. Drafters also make drawings from blueprints, engineering sketches, photos and other sources which show how parts and other objects work, their relation to one another, and how they will be put together.

Drafting work has many specialties, each with its own set of knowledge and skills and each applying to different fields. The five major specialties are: Architectural (see Architecture in the DVC catalog), Civil, Electrical and Electronic (see Electronics in the DVC catalog) and Mechanical. This program introduces students to the fields of mechanical or civil engineering drafting.

To earn a certificate of completion, students must complete each of the required courses with a "C" grade or better. Some courses are not offered every semester so please consult with the program director for assistance in scheduling classes.

#### Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGIN 126</td>
<td>Computer-Aided Design and Drafting — AutoCAD</td>
<td>4</td>
</tr>
<tr>
<td>ENGIN 226</td>
<td>Computer-Aided Drafting Design, Advanced Concepts — AutoCAD</td>
<td>4</td>
</tr>
</tbody>
</table>

In addition, the student must complete either option A, option B, or option C.

**Option A: Emphasis in civil engineering**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCHI 120</td>
<td>Introduction to Architecture and Environmental Design</td>
<td>3</td>
</tr>
<tr>
<td>CONST 114</td>
<td>Blueprint Reading</td>
<td>3</td>
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</table>

Plus at least 2 units from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCHI 126</td>
<td>Surveying Related to Construction</td>
<td>2</td>
</tr>
<tr>
<td>ENGIN 123*</td>
<td>Principles of Civil Drafting</td>
<td>3</td>
</tr>
</tbody>
</table>

**Option B: Emphasis in manufacturing**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ENGIN 119</td>
<td>Introduction to Technical Drawing</td>
<td>4</td>
</tr>
<tr>
<td>MATEC 120</td>
<td>Introduction to Machine Technology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Option C: Emphasis in engineering CAD design**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGIN 129</td>
<td>Introduction to Pro/Engineer</td>
<td>4</td>
</tr>
<tr>
<td>ENGIN 229</td>
<td>Advanced Concepts in Pro/Engineer</td>
<td>4</td>
</tr>
</tbody>
</table>

### Total Units Required

- Certificate of achievement - Mechanical drafting, CAD: 34-37 units
- Certificate of completion - Drafting with CAD: 15-16 units

*Certain courses required for this certificate have recommended or prerequisite coursework that could add additional units.
ENGIN-110 Introduction to Engineering
3 units SC
36 hours lecture / 54 hours laboratory / 18 hours laboratory by arrangement per term
Recommended: eligibility for ENGL 122 or equivalent
Introduction to different engineering disciplines and careers, the role of an engineer in society, engineering ethics, the engineering approach to problem-solving, engineering design process and project development, engineering analysis, concurrent engineering, and application of computers in engineering including design and presentation tools. The emphasis is on hands-on creative problem-solving, teamwork, and effective communication. Students will develop design, analysis, and computer skills through work on projects drawn from various engineering majors. CSU, UC

ENGIN-111 Mathematics for Technicians
4 units LR
90 hours lecture / 36 hours laboratory per term
Recommended: MATH 110 or equivalent
Note: the hand-held calculator will be used extensively as an aid to problem solving
A study of algebraic operations, factoring, fractional equations, quadratic equations, systems of equations, and trigonometric functions, especially as they apply to technical areas. Practical application to real job problems. CSU

ENGIN-119 Introduction to Technical Drawing
3 units SC
36 hours lecture / 72 hours laboratory / 36 hours laboratory by arrangement per term
Note: for students with no previous drafting experience
Introduction to the use of drafting equipment, lettering, line work, geometric construction, sketching and shape description, orthographic projection, dimensioning, sectional and auxiliary views, and pictorial drawing and sketching. Introduction to the use of computers to produce technical drawings. CSU

ENGIN-120 Engineering Drawing
3 units SC
36 hours lecture / 72 hours laboratory / 36 hours laboratory by arrangement per term
Recommended: MATH 114 or equivalent, ENGIN 119 or equivalent
Introduction to orthographic, oblique and perspective projections, auxiliary views and space dimensions, space relationships of points, lines and planes, rotation, tolerancing, threads and fasteners. Introduction to CAD systems and use of the computer to produce engineering drawings. Introduction to solid modeling to produce design drawings. Introduction to conceptual design and graphics as a form of communication in the engineering field. CAN ENGR 2, CSU, UC

ENGIN-121 Engineering Drawing / Descriptive Geometry
3 units LR
36 hours lecture / 72 hours laboratory / 36 hours laboratory by arrangement per term
Recommended: ENGIN 120 or equivalent and MATH 121 or equivalent (may be taken concurrently)
Space relationships of points, lines, and surfaces; double auxiliaries, curved and warped surfaces; intersections, developments, vector analysis, introduction to three dimensional CAD systems and solid modeling to solve descriptive geometry problems. Engineering applications: graphical mathematics. CSU, UC

ENGIN-122 Principles of Mechanical Drafting
3 units LR
36 hours lecture / 72 hours laboratory / 36 hours laboratory by arrangement per term
Recommended: ENGIN 119 or equivalent
Study of the principles of mechanical drafting and graphical problem solving. Course includes instruction in the use of drafting instruments, sketching and shape description, multiview projection, geometric constructions, section and auxiliary view development, axonometric pictorials, and geometric dimensioning and tolerancing (ANSI standards). Students will use both manual and computer methods to solve problems. CSU

ENGIN-123 Principles of Civil Drafting
3 units LR
36 hours lecture / 72 hours laboratory / 36 hours laboratory by arrangement per term
Recommended: ENGIN 119 or equivalent, and ENGIN 111 or equivalent (may be taken concurrently), and ENGIN 126 or equivalent
Introduction to civil drafting as it relates to topographic maps and charts. Course covers reading, interpreting and constructing a variety of maps used for civil engineering such as survey or maps, plat and plot maps, and aerial maps. Students will use both manual and computer methods for drafting of maps. CSU

ENGIN-126 Computer Aided Design and Drafting AutoCAD
4 units LR
54 hours lecture / 54 hours laboratory / 36 hours laboratory by arrangement per term
Note: may be repeated once when software changes
Course is designed for students with no previous manual drafting experience. No previous computer experience is required. Course will cover 2 and 2.5 dimensional computer aided drafting. Emphasis will be on the software package AutoCAD. Hands-on training is emphasized. CSU, UC

ENGIN-129 Introduction to Pro/ENGINEERING
4 units SC
May be repeated once
54 hours lecture / 54 hours laboratory / 36 hours laboratory by arrangement per term
Note: can only be repeated when software version changes
Course is designed for students with no previous manual or computer drafting experience. Course will cover 2D and 3D...
computer aided drafting principles using feature manipulation tools, dimensioning, sections, swept and blend features and assembly drawing. Previous knowledge of Pro/ENGINEER software is not required. CSU

### ENGIN-135 Programming for Scientists and Engineers

4 units LR  
| 54 hours lecture / 54 hours laboratory / 18 hours laboratory by arrangement per term  
Recommended: MATH 192 (may be taken concurrently); eligibility for ENGL 122  
Note: required for engineering transfer students  
An introduction to programming in C/C++ for engineers and scientists. Procedural and object-oriented programming applications encompassing data structures, use of computer software and programming techniques to solve various numerical problems are covered. CSU, UC

### ENGIN-136 Computer Programming for Engineers Using MATLAB

4 units LR  
| 54 hours lecture / 54 hours laboratory / 18 hours laboratory by arrangement per term  
Recommended: MATH 192 (may be taken concurrently); eligibility for ENGL 122  
An introduction to computer-based problem-solving methods for engineers and scientists using MATLAB. An application package known as MATLAB is used to introduce the elements of procedural and object-oriented programming, numerical analysis and operation within data structures. CSU, UC

### ENGIN-140 Plane Surveying

3 units SC  
| 54 hours lecture / 54 hours laboratory per term  
Prerequisite: ENGIN 119 and MATH 121 or equivalent  
Principles and practices of surveying including measurement of distances, directions and elevations; measuring standards, introduction to electronic measurements and metric units; calibration, systematic and random-error analysis; traverse calculations; use of tape, transit, and level, horizontal and vertical curves and mapping. CAN ENR 10. CSU, UC

### ENGIN-141 Plane Surveying

3 units SC  
| 54 hours lecture / 54 hours laboratory per term  
Prerequisite: ENGIN 140 or equivalent  
A continuation of ENGIN 140. Includes cut and fill calculations, control surveys, surveying uses of astronomy, public land surveys, municipal surveys, state plane coordinate systems and photogrammetry, metric and customary units, introduction to computer calculation. CSU, UC

### ENGIN-150 Topics in Engineering

3-4 units SC  
| May be repeated three times  
Variable hours  
A supplemental course in Engineering designed to provide a study of the current developments in the field and related subdisciplines. Specific topics to be announced. CSU, UC (credit limits may apply to UC - see counselor)

### ENGIN-222 Principles of Structural Steel Drafting

3 units LR  
| 36 hours lecture / 72 hours laboratory / 36 hours laboratory by arrangement per term  
Recommended: ENGIN 122 or equivalent and MATH 110 or equivalent  
Fundamental and practical knowledge of how structural steel is used to construct support frames for modern commercial and industrial buildings. Emphasis is placed on how structural drafters, in both design and fabrication offices, prepare the working drawings required to help transform the architect’s and/or structural engineer’s vision into reality. Course covers detailing of steel, concrete, rebar and timber. Typical design calculations are presented as well as Load and Resistance Factor Design. Extensive use of reference books and tables. Student will use both manual and computer methods to solve problems. CSU

### ENGIN-223 Principles of Pipe Drafting

3 units LR  
| 36 hours lecture / 72 hours laboratory / 36 hours laboratory by arrangement per term  
Recommended: ENGIN 122 or equivalent and ENGIN 126 or equivalent  
Fundamentals of pipe drafting including nomenclature, specifications and symbols, notes and abbreviations, pipe representation and layout techniques, elevations, isometrics, fittings, valves and instruments, tanks and vessels, flow diagrams and flow lines. Students will use both manual and computer methods to solve practical problems. CSU

### ENGIN-226 Computer Aided Drafting Design, Advanced Concepts - AutoCAD

4 units LR  
| 54 hours lecture / 54 hours laboratory / 36 hours laboratory by arrangement per term  
Recommended: ENGIN 126 or equivalent  
Note: may be repeated once when software changes  
Course is designed for students with previous knowledge and experience in using AutoCAD. Course covers (1) surface/wireframe and solid modeling features of AutoCAD for 3-dimensional modeling, (2) AutoLISP for customization and optimal application of AutoCAD and (3) some utility options for presentation purposes and project management. CSU

### ENGIN-229 Advanced Concepts in Pro/ENGINEERING

4 units LC  
| 54 hours lecture / 54 hours laboratory / 36 hours laboratory by arrangement per term  
Recommended: ENGIN 119 or equivalent, ENGIN 129 or equivalent  
Note: can only be repeated when software version changes  
Course is designed for students with previous knowledge and experience in using Pro/ENGINEER. Students will continue to learn advanced techniques for capturing design intelligence. This class builds upon the basics covered in Introduction to Pro/ENGINEER. Some other aspects of mechanical design,
such as assembly management techniques, creating models via surfacing and style features and working with skeletons will be introduced. Troubleshooting and managing existing models by tacking references and interdependencies is a driving consideration in the course. Upon completion of the course, student will exhibit a demonstrated competence in a comprehensive range of Pro/ENGINEER skills and techniques. CSU

**ENGIN-230 Introduction to Circuits and Devices**
4 units LR
54 hours lecture / 54 hours laboratory per term
Prerequisite: MATH 193 or equivalent and PHYS 230 or equivalent
Recommended: eligibility for ENGL 122 or equivalent
The course covers the subjects of electrical quantities that include Ohm’s law, Kirchoff’s network theorems, AC and DC circuit analysis; transient and steady state response of circuits, digital circuits, solid state devices, magnetism and magnetic circuits. CAN ENGR 6+12, CSU, UC

**ENGIN-239 Statics and Strength of Materials**
4 units LR
54 hours lecture / 54 hours laboratory / 18 hours laboratory by arrangement per term
Prerequisite: PHYS 110, MATH 121
A study of mechanics and strength of materials, including equilibrium of 2-D systems, internal forces in structures, hydrostatic forces, sectional properties, stress and strain, flexural and shear stresses, beams and columns and elastic stability. Laboratory experiments to determine selected properties of engineering materials and strength of structural elements. CSU

**ENGIN-240 Properties of Engineering Materials**
4 units LR
54 hours lecture / 54 hours laboratory / 18 hours laboratory by arrangement per term
Prerequisite: CHEM 120 or equivalent and PHYS 130 or equivalent
The study of properties of engineering materials as related to their atomic, microscopic, and macroscopic structures. CAN ENGR 4, CSU, UC

**ENGIN-255 Statics**
3 units LR
54 hours lecture / 18 hours laboratory per term
Prerequisite: PHYS 130 or equivalent and MATH 193 or equivalent
Recommended: ENGIN 135 or equivalent and eligibility for ENGL 122 or equivalent
A study of the effects of concentrated and distributed forces on the equilibrium of particles, rigid bodies, and fluids and energy equation approaches to equilibrium and stability. Statically determine analysis of balance of forces structures (trusses, beams, frames, arches, and cables) and machines. CAN ENGR 8, CSU, UC

**ENGIN-256 Dynamics**
3 units LR
54 hours lecture / 18 hours laboratory by arrangement per term
Prerequisite: ENGIN 255
Recommended: MATH 294
This course introduces students to the principles of Newtonian Dynamics in one, two, and three dimensional motions. Students will study the kinematics and kinetics of a single particle, system of particles, and rigid bodies. This will include conservation laws, work, energy, impulse and impact. The student will also be presented with an introduction to free and forced vibrations. CSU, UC

**ENGIN-298 Independent Study**
.5-3 units SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered
An opportunity for advanced students or students with special interest to study selected topics in a particular field to undertake special studies in that field under direction of the faculty. CSU, UC (credit limits may apply to UC - see counselor)

**English as a second language – ESL**

**ESL-067 ESL: Introduction to College English Skills**
3 units CR/NC
Not degree applicable
52.5 hours lecture per term
Recommended: ESL Assessment Process
This course is designed for students for whom English is a second language at the introductory level who need to improve their speaking, listening, reading and writing skills to prepare them for entry into more advanced courses in the ESL program. The goals of the course are to develop and improve English language skills and to introduce students to the college environment.

**ESL-072 ESL: Pronunciation/Listening Skills**
2 units CR/NC
May be repeated once
Not degree applicable
18 hours lecture / 54 hours laboratory per term
This course is designed for ESL or international students who need instruction in improving listening comprehension and oral communication skills. Students will learn to perceive a variety
of speech patterns and listening cues and a variety of speech forms, including conversations, directions, and lectures. Students will practice the sounds and rhythms of American English and improve their fluency by speaking in a variety of situations.

ESL-076  ESL: Intermediate Reading and Comprehension Skills
3 units  SC
Not degree applicable
54 hours lecture / 18 hours laboratory per term
Recommended: ESL 067 or equivalent
Note: each section has a weekly 1 hour scheduled study group. Students must check the course schedule and reserve the associated time.
This is an intermediate-level course designed for students for whom English is a second language who need instruction in reading comprehension and study skills to enhance their performance in future college courses. Students will continue to develop basic reading comprehension skills such as identifying main ideas in paragraphs, understanding paragraph organization, and using context clues to understand new vocabulary.

ESL-078  ESL: Intermediate Writing Skills
3 units  SC
Not degree applicable
54 hours lecture / 18 hours laboratory per term
Recommended: ESL 067 or equivalent
Note: each section has a weekly 1 hour scheduled study group. Students must check the course schedule and reserve the associated time.
This course is designed for ESL students at the intermediate level who need to improve their ability to write correct sentences and who are ready to begin writing paragraphs and narratives. Course work will include work on grammar, usage, parts of speech, punctuation, and idioms. Writing assignments will include sentences, paragraphs and narratives.

ESL-081  ESL: Studies in Reading, Writing, and Listening / Speaking Skills
2 units  SC
May be repeated three times
Not degree applicable
36 hours lecture per term
Recommended: eligibility for ESL 086 and ESL 088
This course is designed for students for whom English is a second language who need to improve their speaking, listening, reading and writing skills to prepare them for more advanced courses in the ESL and English programs. Topics for the course may include reading comprehension, spelling, vocabulary, sentence structure, punctuation, and conversation.

ESL-083  ESL: Language Laboratory
2 units  CR/NC
May be repeated once
Not degree applicable
18 hours lecture / 54 hours laboratory per term
This laboratory course is designed for ESL or international students who need to practice their reading, writing, listening and speaking skills. The course offers basic instruction on how to use word-processing, basic English language learning software, and the internet. The course offers individualized instruction to students at various skill levels, from beginning to advanced. The course provides the setting and instructional assistance for students to practice communication skills to get help with English class assignments, and to employ computer resources.

ESL-086  ESL: High Intermediate Reading Comprehension
3 units  SC
Not degree applicable
54 hours lecture / 18 hours laboratory per term
Recommended: ESL 076 or equivalent
Note: each section has a weekly 1 hour scheduled study group. Students must check the course schedule and reserve the associated time.
This course is designed for ESL students at the high intermediate level who need preparation for college level reading and related study skills. Class activities include a close exploration of the reading process - especially of textbook materials; vocabulary development; listening practice and note-taking; use of library, dictionary and other reference resources; academic and cultural orientation.

ESL-088  ESL: High Intermediate Writing Skills
3 units  SC
Not degree applicable
54 hours lecture / 18 hours laboratory per term
Recommended: ESL 078 or equivalent
Note: each section has a weekly 1 hour scheduled study group. Students must check the course schedule and reserve the associated time.
This course is designed for ESL students at the high intermediate level who need to improve their writing skills to prepare for college-level writing and who are ready to begin writing essays. Course work will include instruction in sentence, paragraph and essay structure; principles of grammar and mechanics; voice-audience awareness; revising and editing techniques. Writing assignments will include paragraphs and essays.

ESL-091  ESL: Topics in Vocational English Skills
.5-3 units  SC
May be repeated three times
Variable hours
ESL 091 is designed for advanced English as a Second Language students who may be concurrently enrolled in a course required for a certificate of achievement and completion. This course will teach reading skills, vocabulary-building strategies, writing skills, listening and oral communication skills, and study skills to help students master the content and requirements in a course leading to a certificate of achievement and completion. The focus of this course will change depending on the vocational area that it serves.
English as a second language

ESL-096A  Introduction to College Reading and Study Skills

3 units  SC
Not degree applicable
54 hours lecture / 18 hours laboratory per term
Recommended: ESL 086 and ESL 088 or eligibility for ESL 096A based on the result from the ESL assessment process
This course is designed for advanced ESL students to develop the critical reading skills needed in college. Students will learn to identify themes and supporting details as well as to determine methods of organization and relationship of ideas in college-level materials. A primary aim is to increase students’ reading fluency as well as their ability to comprehend, interpret and remember what they read. This course will also emphasize effective college study skills and vocabulary development.

ESL-098A  Introduction to College Writing

3 units  SC
Not degree applicable
54 hours lecture / 18 hours laboratory per term
Recommended: ESL 086 and 088 or eligibility for ESL 096A based on the result from the ESL assessment process
This course is designed for advanced ESL students to develop confidence and fluency in writing essays or themes for American colleges. In this context, students will learn to write clear, complete and varied sentences and coherent paragraphs. An additional goal is for students to learn basic rules of grammar, punctuation and spelling and to be able to identify and correct errors in their writing. Students will also become familiar with the steps of the writing process: drafting, revising, editing, proofreading.

ENGL-091  Special Studies in Reading, Writing, Listening, Speaking Skills

1 unit  CR/NC
May be repeated three times
Not degree applicable
9 hours lecture / 27 hours laboratory per term
Recommended: ESL 096 or ESL 098A
Enhances reading/writing assessment process or ESL 096A
This series of short-term, one-unit mini-courses which develop specific skills in reading, writing, listening, and speaking. Courses include reading comprehension, speed and efficient reading, spelling/vocabulary, sentence structure, punctuation and conversation. Special sections may be offered to foreign English as a Second Language students.

ENGL-092  College Study Skills

2 units  CR/NC
Not degree applicable
36 hours lecture per term
Recommended: ESL 096 or ESL 098A
This course is designed to improve the students’ study skills: goal setting; time management; note taking; reading comprehension; reading strategies for textbooks; main idea recognition; underlining and other text marking; concentration and memory; effective writing; test taking strategies. Students also determine their preferred learning style and discover ways to use that style most efficiently. Practice exercises will include readings from a variety of college subjects.

ENGL-096  Introduction to College Reading and Study Skills

3 units  SC
Not degree applicable
54 hours lecture / 18 hours laboratory per term
Recommended: reading/writing assessment process or ESL 096A
Note: ESL 096A is recommended for ESL students
This course is designed for students who need work in the basic reading skills required for college. Students will learn to identify main ideas and supporting details and to determine methods of organization and relationship of ideas. A primary aim is to increase students’ enjoyment of reading as well as their ability to comprehend, interpret, and remember what they read. The course will also emphasize effective study skills and vocabulary development.

ENGL-098  Introduction to College Writing

3 units  SC
Not degree applicable
54 hours lecture / 18 hours laboratory per term
Recommended: reading/writing assessment process or ESL 096A
Note: ESL 098A is recommended for ESL students
This course is designed to help students gain confidence and fluency in writing essays or themes. In this context, students will
learn to write clear, complete and varied sentences and coherent paragraphs. An additional goal is for students to learn basic rules of grammar, punctuation and spelling. Students will also become familiar with the steps of the writing process: drafting, revising, editing, proofreading.

ENGL-105 Studies in Writing

-5-6 units SC
May be repeated three times
Not degree applicable
Variable hours
Recommended: ENGL 096 and ENGL 098 or equivalent recommendation from the assessment process
This course focuses on developing students' ability to write at the college level. Depending on the topic, the course may cover such diverse areas as: the writing process, developing a sense of voice in writing, critical analysis of student writing, identifying the organizational structures of various essays, and close analysis of fiction and nonfiction.

ENGL-110 English Grammar and Usage

3 units SC
Not degree applicable
54 hours lecture per term
This course provides intensive instruction on the rules of grammar, punctuation, spelling and their application in writing. Students will learn to recognize grammatical errors in their writing, make informed judgments about the style and syntax of the sentences they write, reduce the number of misspelled words, and to use a broader vocabulary in their writing. The course is intended to prepare students for more advanced English classes and to increase their knowledge of the fundamentals of English.

ENGL-116 College Reading Development

3 units SC
54 hours lecture per term
Recommended: successful completion of ENGL 096 or equivalent recommendation from the reading/writing assessment process
Note: students may apply either ENGL 116 or 118 to the associate degree, but not both courses
This course is designed to develop strategies for reading a variety of college-level materials. Students will learn ways to interact with what they read in order to increase appreciation as well as comprehension. The course will cover close analysis of reading, flexible approaches to reading, vocabulary development, and study skills.

ENGL-118 College Writing Development

3 units SC
54 hours lecture per term
Recommended: successful completion of ENGL 098 or equivalent recommendation from the reading/writing assessment process
Note: students may apply either ENGL 116 or 118 to the associate degree, but not both courses
This course helps students to improve their expression of ideas in college-level expository essays. Through continual writing practice, students will improve their skills in observation, fluency, organization, and revision, as well as other parts of the writing process. Students will learn to analyze a variety of texts with an emphasis on nonfiction.

ENGL-122 Freshman English: Composition and Reading

3 units LR
54 hours lecture per term
Prerequisite: successful completion of ENGL 116 and ENGL 118 or equivalent recommendation from assessment process or English AP score of 3.
This course engages students regularly in the writing and reading process. Students will apply disciplined thought to language in order to comprehend and analyze college-level readings and to compose college-level essays that are coherent, detailed, and free of serious error. In their essays, students will use a variety of types of support including primary and secondary research. Students will understand and employ varied rhetorical strategies used by accomplished writers. CAN ENGL 2, ENGL 122+123 = CAN ENGL SEQ A, CSU, UC

ENGL-123 Freshman English: Composition and Reading

3 units LR
54 hours lecture per term
Prerequisite: ENGL 122
ENGL 123 is a continuation of ENGL 122 emphasizing the study of poetry, fiction, and drama. The course is designed to encourage continued improvement in essay composition through a focus on critical thinking about literary works. It will increase understanding of the creation of aesthetic meaning and the use of symbolic forms in language and thought; and introduce students to several literary genres in the context of culture. CAN ENGL 4, ENGL 122+123 = CAN ENGL SEQ A, CSU, UC

ENGL-124 The Nature of Language: An Introduction To Linguistics

3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
This course introduces students to the study of formal, psychological and socio/cultural properties of language. Students will learn the analysis, description, and functions of language in relation to culture, society, and personality. CSU, UC

ENGL-126 Critical Thinking: The Shaping of Meaning in Language

3 units LR
54 hours lecture per term
Prerequisite: ENGL 122
This course will focus on the development of logical reasoning and analytical and argumentative writing skills. It is designed to develop critical thinking, reading, and writing skills beyond the level expected in ENGL 122. This course also investigates meaning and its creation and transmission through language. CSU, UC
ENGL-130  Introduction to Technical Writing
3 units  SC
54 hours lecture per term
Recommended: ENGL 122 or equivalent
This course is an introduction to writing in the unique technical environments of science and industry. Emphasis is on understanding various levels of technical discourse applied to different audiences, selecting appropriate evidence, and employing various levels of technical vocabulary and abstraction. Visual aids, technical metaphor and related communication principles are also addressed. CSU

ENGL-140  Tutor Training
3 units  SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
This course introduces students to the basic principles and methods of tutoring, including but not limited to the tutoring sequence, the Socratic method of questioning, communication skills, and learning theory. Students will receive instruction in how to work with tutees who have difficulties comprehending reading, developing writing and utilizing study skills with the intent of making those tutees independent learners. CSU

ENGL-150  Introduction to Literature
3 units  SC
54 hours lecture per term
Recommended: ENGL 122
This course will focus on representative works from the four major genres of literature (poetry, drama, the short story, the novel) and establish connections between literature and other art forms, such as music and visual arts. This course will teach students to recognize the distinguishing elements of each literary form and develop a competency in the methods used to analyze all literature. The choice of texts will reflect the historical development of these genres in order to enhance students' appreciation of the extent to which imaginative literature reflects its historical moment and shapes and is shaped by expressive and visual arts of the time. CSU, UC

ENGL-151  The Short Story
3 units  SC
54 hours lecture per term
Recommended: ENGL 122 or equivalent
This course is an introduction to the short story: themes, forms, history of the form, individual writer's techniques. Students read and discuss short stories and become more independent critics of them. In addition, as with the study of all literature, students can understand many aspects of life and themselves better as a result of the deep exposure to characters and cultures different from their own. CSU, UC

ENGL-152  The Short Film
3 units  SC
54 hours lecture per term
Recommended: ENGL 122
This survey course explores the history, nature, and structure of the short narrative, documentary, and experimental film. The course compares and contrasts literature to film, noting how each medium deals with theme and structure. Many films from the DVC collection, including some showing the lives and stories of members of American subcultures and cultures around the world, along with new releases from major short-films distributors, will be viewed, discussed and written about. CSU, UC (credit limits may apply to UC - see counselor)

ENGL-153  Contemporary Poetry
3 units  SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
This course focuses on the reading, critical study, critical analysis, and discussion of contemporary poetry. Postmodern American poetry is emphasized, although consideration will also be given to contemporary world poetry and other poetry written in English. Earlier traditions, such as modernism, will be briefly discussed. Historical, social, cultural, and psychological contexts will be provided. Consideration will be given to the forms, functions, and definitions of the poetry studied. Students should reach a heightened awareness and understanding of language and artistic excellence. CSU, UC

ENGL-154  Shakespeare and His World
3 units  SC
54 hours lecture per term
Recommended: ENGL 122 or equivalent
Study of the language, structure, characterization, and philosophy of Shakespeare's plays; the historical, social, and artistic forces which helped to shape his works during the Elizabethan and Jacobean ages; the relationship between Shakespeare's work as literature, examined by close analysis and as performing arts, experienced in theater, film, opera, or television. CSU, UC

ENGL-155  Studies in Literature
.5-.3 units  SC
May be repeated three times
Variable hours
Recommended: ENGL 122 or equivalent
This course focuses on the reading, critical study, critical writing and discussion of a special literature. Consideration will be given to the literature's forms, functions, and definitions. Also of concern will be the literature's significance in terms of historical, social, cultural, and psychological contexts. CSU, UC (credit limits may apply to UC - see counselor)

ENGL-162  Language, Literature and Culture
3 units  SC
54 hours lecture per term
Recommended: eligibility for ENGL 116/118
This course examines language, literature and the arts from a multi-cultural context. Students will read stories, drama, poetry and essays that reflect a broad range of cultural view points; they will observe and analyze relevant print and visual media; they will compare and consider such artistic forms as architecture, music, fashion and painting in the context of compared cultures. Attention will be devoted to understanding the linguistic or attitudinal challenges posed by cross-cultural communication. The course will be helpful to American-born students seeking a wider cultural perspective and to International students.
and other advanced ESL students in their acculturation and language development efforts. CSU, UC

ENGL-163 Asian American Literature
3 units SC
54 hours lecture per term
Recommended: ENGL 122 or equivalent
This course introduces students to a variety of literary works from the Asian American culture, which are significant in illuminating the Asian American cultural experience. Readings are chosen for their literary, historical, cultural, philosophical and psychological importance. CSU, UC

ENGL-164 Native American Literatures
3 units SC
54 hours lecture per term
Recommended: ENGL 122
Students will focus on the literary traditions and cultures of Native Americans, and through the study of various oral and written literary works (such as ceremonies, songs, myths, folk tales, oratories, autobiographies, poetry and prose) will examine issues important to Native peoples, such as cultural identity, language, self-determination. CSU, UC

ENGL-166 African American Literature
3 units SC
54 hours lecture per term
Recommended: ENGL 122 or equivalent
This course is a study of the major works of fiction and poetry by black writers in America and Africa, spanning three hundred years. Students will gain an awareness of main themes, concepts, and characteristics of the literature. Emphasis is on the development of concepts and skills that will enable the student to study the literature, make comparisons, and draw conclusions about the nature of its development, its origin, and the influence of rhetoric, religion, philosophy, history, music, or other arts on literature. CSU, UC

ENGL-167 Latin American Literature
3 units SC
54 hours lecture per term
Recommended: ENGL 122 or equivalent
The course focuses on the literature of Latin American cultures. Through analysis of poetry, fiction, drama, music and film, students will explore political, social, historical, and psychological elements that comprise the voices of Latin Americans. CSU, UC

ENGL-168 The Literatures of America
3 units SC
54 hours lecture per term
Recommended: ENGL 122
This course examines the major literary works produced by selected authors of the main racial/cultural groups in American society: African American, Native American, Asian American, Chicano, Latino, and European American. Readings will be primarily fiction and poetry, but will include some essays, first-per-son narratives and journalistic pieces. Through reading, writing and discussing, students will explore the rich culture reflected in representative works. Through comparing and contrasting the contributions and points of view of various authors, students will gain an understanding of the issues important to these writers. In addition, students will consider the social and historical influences shaping the literatures of America. CSU, UC

ENGL-170 World Mythology
3 units SC
54 hours lecture per term
Recommended: ENGL 122
This course explores myth as a vital part of human experience, individual and collective, past and present. Myths from a wide range of cultures (including Native American, African, Asian, Middle Eastern and European) are examined in terms of their appearance in folklore, ritual, literature and the arts, and are compared with regard to their thematic content and the beliefs and values they reflect. CSU, UC

ENGL-172 The Bible As Literature
3 units SC
54 hours lecture per term
Recommended: ENGL 122
Students read the Hebrew Bible (Old Testament) and the New Testament as literature, looking closely at the physical, intellectual, political and spiritual environments of the writers. Major themes and characters are given close attention, as is the development of the canon. Literary genres such as poetry, essays, letters, and epics in scripture are compared with those genres found in other world literatures. CSU, UC

ENGL-173 Introduction to Gay and Lesbian Multicultural Voices in Literature
3 units SC
54 hours lecture per term
Recommended: ENGL 122
This course presents 20th century literature and related arts by and about gay men and lesbians from Hispanic/Latino, African American, European American, Asian American, Native American cultural, ethnic, and class groups. Under scrutiny will be literature written by gay men and lesbians with a focus on language, ideology, substance, and form. Through a study of the artist’s work and an understanding of the historical, social, and psychological forces shaping literature and related arts, students should reach a heightened awareness of a segment of society not often studied. Through criticism of and writing about the art, the students should also reach a greater understanding of artistic excellence. CSU, UC

ENGL-175 Science Fiction and Fantasy Literature
3 units SC
54 hours lecture per term
Recommended: ENGL 122 or equivalent
This course will offer reading, critical study, and discussion of science fiction as a literary form with consideration of major types, authors, historical development, the media in which science fiction has been presented, how it both mirrors and influ-
ences cultural trends, and how it functions as modern mythology. CSU, UC

ENGL-177 Children’s Literature
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
This course examines literature written for children as literature, applying the methods of literary criticism to that literature. The course also places the literature in a historical context, tracing its development from its earliest oral origins to the present, comparing and contrasting the contributions and points of view of various underrepresented ethnic groups such as African American, Native American, European American, Asian American, and Hispanic. The course material includes literature from various cultures and from various time periods. CSU, UC

ENGL-180 Literature of the Drama
3 units SC
54 hours lecture per term
Recommended: ENGL 122 or equivalent
This course examines representative works in dramatic literature and explores how these works are transformed by the process of filming or staging the play. Through reading, performance, writing, scene work, discussion, and, in some instances, interacting with professionals in the field, students will reach a greater appreciation for major elements of drama like plot, characterization, theme, setting, and language. Reflecting on age-old themes and complex characters will give students new insights into their own values, choices, role models, and cultural heritage. CSU, UC (credit limits may apply to UC - see counselor)

ENGL-190 Women’s Literature
3 units SC
54 hours lecture per term
Recommended: ENGL 122
This course presents literature and related arts by and about women from at least three of the following cultural, ethnic, and racial groups: Hispanic-Latina American, African American, European American, Asian American, and Native American cultural, ethnic, and racial groups. Under scrutiny will be women’s prescribed role in society as well as the language, ideology, substance and form of the artistic renderings. Through a study of the artist’s work and an understanding of the historical, social, and psychological forces shaping the art, students should reach a heightened awareness of women’s contributions and struggles in our society as well as in others. Through critique of and writing about the art, the students should also reach a greater understanding of artistic excellence. CSU, UC

ENGL-222 Creative Writing
3 units SC
May be repeated once
54 hours lecture per term
Prerequisite: eligibility for ENGL 122
Note: the student is limited to a maximum of 12 units in any combination of ENGL 222, 223, and 224
Close study of the techniques of selected authors. Students present original writing for informal discussion and criticism by class and instructor. CAN ENGL 6, CSU, UC (credit limits may apply to UC - see counselor)

ENGL-223 Short Story Writing
3 units SC
May be repeated once
54 hours lecture per term
Recommended: eligibility for ENGL 122
Note: the student is limited to a maximum of 12 units in any combination of ENGL 222, 223, and 224
In-depth study of the elements of the short story. Students write original stories for discussion and criticism by both class and instructor. CSU, UC (credit limits may apply to UC - see counselor)

ENGL-224 Poetry Writing
3 units SC
May be repeated once
54 hours lecture per term
Recommended: eligibility for ENGL 122
Note: the student is limited to a maximum of 12 units in any combination of ENGL 222, 223, and 224
In-depth study of the elements of poetry. Students write original poems for discussion and criticism by both class and instructor. CSU, UC (credit limits may apply to UC - see counselor)

ENGL-225 Nonfiction Writing
3 units SC
54 hours lecture per term
Prerequisite: eligibility for ENGL 122
This beginning workshop of expository writing provides a creative writing environment in which students will develop skills and insights related to research techniques, interviewing, and specialties of nonfiction such as autobiography, biography, and general features. Students will read works of American authors with particular attention paid to underrepresented groups. Students will present original prose writing for informal discussion and criticism by the class instructor. CSU, UC

ENGL-252 Early English Literature
3 units SC
54 hours lecture per term
Prerequisite: ENGL 122
Students read characteristic and significant British literature from its beginnings to Johnson; examine the evolution of style and manner in the written form of the language; appreciate the pressure of the cultural heritage upon native art forms, ideas and institutions and generally learn to read literature more skillfully. The course relates the literature to historical and cultural developments as expressions of periods and their styles and consciously relates that to at least one art - painting, music, or architecture. CAN ENGL 8, ENGL 252+253 = CAN ENGL SEQ B, CSU, UC
ENGL-253 Survey of Late English Literature
3 units SC
54 hours lecture per term
Prerequisite: ENGL 122
Students read characteristic and significant works of selected British writers, examine the evolution of style and manner in the written form of the language; and gain general skills in reading literature. In addition, students will be able to accurately characterize author intent in narrative, thematic, and stylistic concerns, as well as identify and analyze the role class, cultural heritage, gender and race play in the works read. Students will relate the poetry and prose to the historical context in which they were composed, including their aesthetic relationship to at least one art - painting, music or architecture. CAN ENGL 10, ENGL 252+253 = CAN ENGL SEQ B, CSU, UC

ENGL-262 Survey of American Literature I (First Contact - 1865)
3 units SC
54 hours lecture per term
Prerequisite: ENGL 122 or equivalent
This course surveys the distinct voices that comprise American Literature from the 15th Century to the American Civil War. The works and viewpoints of Native Americans, Africans and African Americans, as well as those of English-speaking, Spanish-speaking and French-speaking colonials, will be examined. CAN ENGL 14, ENGL 262+263 = CAN ENGL SEQ C, CSU, UC

ENGL-263 Survey of American Literature
3 units SC
54 hours lecture per term
Prerequisite: ENGL 122
Survey of major literary works produced by American writers from approximately 1865 to the present. Students read poetry, fiction, and drama by American poets, prose writers, and playwrights. Changes in literary style are closely examined and compared with corresponding changes in other art forms - painting, music, sculpture, architecture, film produced in America and abroad during the period. CAN ENGL 16, ENGL 262+263 = CAN ENGL SEQ C, CSU, UC

ENGL-272 Early World Literature
3 units SC
54 hours lecture per term
Recommended: ENGL 122
Reading, presentation, and discussion of representative oral works and manuscripts of ancient, medieval, and renaissance literature in modern English translations. CSU, UC

ENGL-273 Late World Literature
3 units SC
54 hours lecture per term
Recommended: ENGL 122
Reading, presentation and discussion of representative works of modern and postmodern literature in English translations. CSU, UC

ENGL-298 Independent Study
.5-3 units SC
May be repeated three times
Variable hours
Prerequisite: Students must submit an acceptable educational contract to department and instruction office; topics must extend beyond courses offered.
This course provides an opportunity for students with special interests to pursue selected topics under the direction of the faculty. CSU, UC (credit limits may apply to UC - see counselor)

Family life education – FAMLI
See Early Childhood Education - ECE

Field studies – FIELD
Counseling Division
Terry Armstrong, Dean
Counseling Center 111
925-685-1230 x 2288

Possible career opportunities
Diablo Valley College’s field studies course offers students an opportunity to increase career awareness and expanded learning in a field in which they may want to further explore or gain experience.

FIELD-234 College Instructional Assistance Work
1-3 units SC
May be repeated three times
Variable hours
Note: students are required to have consent of Career Development Office and Division Chairperson and be supervised by a campus instructor
Students work as instructional assistants, laboratory assistants and research assistants in the various departments on the campus. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects outside of class and help the instructor with reading and evaluation of class assignments. Students may not assist in course sections in which they are currently enrolled. CSU

Film – FILM
Applied and Fine Arts Division
Dean of Applied and Fine Arts
Humanities Building 112 and 113
925-685-1230 x 2312
Possible career opportunities
The study of film prepares students for careers in the entertainment industry, law, business, and education, or for further education at the graduate or professional level. Career options include: feature film editors, executives in video distribution companies, technicians for local news programs, and independent filmmakers. Other occupations include: cinematographer, movie and stage grip, technical writer, playwright, screenwriter, author, producer, editor, rigger, camera operator, and film laboratory technician. Some careers may require more than two years of study.

**FILM-110 National Cinema**
1 unit CR/NC
May be repeated three times
18 hours lecture per term
Recommended: eligibility for ENGL 122
Each semester the class will focus on one specific country or geographic area looking for stylistic and thematic trends and conventions. This course will concentrate on major films and trends from specific countries or geographic areas such as China, India, Latin America, Asia, England, France, Italy, Germany, Russia, and Africa. CSU

**FILM-120 Film Genre**
1 unit CR/NC
May be repeated three times
18 hours lecture per term
Recommended: eligibility for ENGL 122
This course is a study of major genres including romantic comedy, film noir, the western, the musical, the war film, etc. Each class will focus on one specific genre. This course will emphasize how genres develop, common themes, and characters and how the language and syntax of film is used in this specific genre. The student will compare the same genre in literature. The course will also examine the relationship of genres to historical, social and cultural trends. CSU

**FILM-130 Great Directors**
1 unit CR/NC
May be repeated three times
18 hours lecture per term
Recommended: eligibility for ENGL 122
This course is a study of major film directors such as Chaplin, Hitchcock, Wilder, Spielberg, Fellini or Kurosawa. Each class will focus on one specific director, looking for stylistic and thematic trends and conventions and acknowledge their influence on other film makers. The course will place the director in the flow of historical, social and cultural trends. CSU

**FILM-140 American Cinema/American Culture**
3 units SC
54 hours lecture per term
This course is a history of cinema focusing on the development of American film making as part of a larger cultural context including literature, drama, various genres, vaudeville and related art forms. The course will investigate the interplay of economic, industrial, aesthetic, and cultural forces that shape the language of film - how film conveys meaning and functions as a work of art. Other themes to be explored include how Hollywood functions as a business, reflects societal values and concerns (such as the Great Depression and WWII), and responds to new technologies such as radio, television, and the coming of sound for film. CSU, UC

**FILM-150 Topics in Film**
1-3 units SC
May be repeated three times
Variable hours
Recommended: eligibility for ENGL 122
A supplemental course in film designed to provide a study of topics not covered in the regular film classes. Specific topics to be announced. CSU

**FILM-160 American Ethnic Cultures in Film**
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course will evaluate and explore various American cultures, African American, American Indian, Asian American, Hispanic, and European American as represented in feature film. It will analyze similarities and differences paying particular attention to social and cultural representations. In addition, the course will include issues specific to the world of cinema including how film language communicates ideas and stimulates emotional responses while Hollywood distribution and marketing practices amount to a form of censorship. CSU, UC

**FILM-180 Comparative Film Studies**
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course will examine major trends and genres in the world of film. This course will emphasize how plot, theme and character are developed in a visual medium and how the language and syntax of film conveys meaning as compared to literature and drama. The course will also examine the relationship of film to historical, social, and cultural trends. CSU, UC (credit limits may apply to UC – see counselor)

**FILM-280 Introduction to Film: American Cinema 1900-1950**
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course is a survey of major trends in American Cinema from 1900 to the demise of the studio system in the 1950s. The methodology includes lectures and the viewing of key films from notable artists and movements that have influenced the development of film arts around the world. In addition, this course will analyze how social, economic, and historical forces shape film art, as well as, the development of global media culture, and understanding how cinema communicates as an art form. CSU, UC
FILM-281 Introduction to Film: World Cinema 1900-1960
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course is a survey of major trends in World Cinema from 1900 to the French New Wave of the 1960s. The methodology includes lectures and the viewing of key films from notable artists and movements that have influenced the development of film arts around the world. An analysis of how social, economic, and historical forces shape film art will be stressed, as well as, the development of global media culture, and understanding how film communicates as an art form. CSU, UC (credit limits may apply to UC – see counselor)

FILM-282 Introduction to Film: American Cinema 1950 to the Present
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course is a survey of major trends in American Cinema from the demise of the studio system in the 1950’s to the present. The methodology includes lectures and the viewing of key films from notable artists and movements that have influenced the development of film arts around the world. An analysis of how social, economic, and historical forces shape film art will be stressed, as well as the development of global media culture, and understanding how film communicates as an art form. CSU, UC

FILM-283 Introduction to Film: World Cinema 1960 to the Present
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course is a survey of major trends in World Cinema since 1960 from French New Wave to the growth of Asian, Latin American, and Third-World cinema. The course methodology includes lectures and the viewing of key films from notable artists and movements that have influenced the development of film arts around the world. It will stress the social, economic, and historical forces that shape film art, as well as the development of global media culture and understanding how film communicates as an art form. CSU, UC

FILM-284 Introduction to Film - Women in Cinema
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course is a survey of the major influences of women on film history. The course includes lectures and the viewing of key films made by notable women directors, producers, screenwriters, editors and actors who have influenced the development of film arts around the world. An analysis of how social, economic, and historical forces have shaped women’s role in the development of film will be stressed, as well as, growth of global media culture, and how film communicates as an art form. CSU, UC

FILM-290 Film and TV Script Writing - Beginning
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
The purpose of this class is to learn to write screenplays. Therefore the student will study film terms and formats, work with treatment, scenario and shooting scripts, analyze film and television clips, shorts, tapes, and full-length films with emphasis on understanding the writer’s perspective. Numerous writing assignments and exercises will be assigned with the intent of developing a student’s ability to write for a visual medium. CSU

FILM-291 Film and TV Scriptwriting - Intermediate
3 units SC
54 hours lecture per term
Prerequisite: FILM 290 or equivalent
Recommended: eligibility for ENGL 122
The purpose of this class is to allow the serious continuing student the ability to improve writing for a visual medium. The student will be expected to develop and write a feature length script. In addition there will be numerous writing assignments and analysis of film and television clips, shorts, tapes, and full-length films with an emphasis on understanding the writer’s perspective. CSU

FILM-292 Fundamentals of Film Making - Beginning
3 units SC
54 hours lecture per term
Prerequisite: FILM 292 or equivalent
This class is devoted to the intensive examination of film and video techniques applied to the execution of visual ideas. Pictorial composition, camera operation, basic script writing, directing, principles of editing, lighting and sound recording and mixing will be emphasized. This course is devoted to developing and refining technical, practical and creative film-making skills. Students will be expected to complete several projects during the course of the semester. These projects can be in super 8, 16mm or various video formats. The projects will be narrative in form. CSU, UC (credit limits may apply to UC – see counselor)

FILM-293 Fundamentals of Film Making - Intermediate
3 units SC
54 hours lecture per term
Prerequisite: FILM 292 or equivalent
Recommended: eligibility for ENGL 122
The purpose of this class is to allow the serious continuing students the opportunity to improve their ability to shoot and edit for a visual medium. The students will be encouraged to expand their technical capabilities. In addition, they will be expected to produce richer, fuller works marrying their developing technical competence with increasingly meaningful themes. CSU, UC (credit limits may apply to UC – see counselor)
**FILM-298  Independent Study**

.5-3 units  SC  
May be repeated three times  
Variable hours  
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered.  
An opportunity for students to pursue special interests under direction of the faculty. CSU, UC (credit limits may apply to UC – see counselor).

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**FRNCH-120  First Term French**

5 units  SC  
90 hours lecture / 18 hours laboratory by arrangement per term  
Note: FRNCH 120 and 121 combined are equivalent in content to FRNCH 145, 146 and 147 combined  
This is a basic course in understanding, speaking, reading, and writing French. There is extensive utilization of cultural material and information. CAN FREN 2; FRNCH 120 + 121 = CAN FREN SEQ A, CSU, UC (credit limits may apply to UC – see counselor).

**FRNCH-121  Second Term French**

5 units  SC  
90 hours lecture / 18 hours laboratory by arrangement per term  
Recommended: FRNCH 120 or equivalent  
Note: FRNCH 120 and 121 combined are equivalent in content to FRNCH 145, 146 and 147 combined  
A second-term basic course at a more advanced level in understanding, speaking, reading, and writing French. There is extensive utilization of cultural material and information. CAN FREN 2; FRNCH 120 + 121 = CAN FREN SEQ A, CSU, UC (credit limits may apply to UC – see counselor).

**FRNCH-150  Topics in French**

3-4 units  SC  
May be repeated three times  
Variable hours  
A supplemental course in French to provide a study of current concepts and problems in French and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

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**French – FRNCH**

Students with prior foreign language instruction should check with a language teacher regarding proper placement in foreign language courses. The following system is generally used to determine the appropriate term of college work based on high school language: two years equal one college term; three years equal two college term; four years equal three college terms.

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**Applied and Fine Arts**

Dean of Applied and Fine Arts  
Humanities Building 112 and 113  
925-685-1230 x 2312

**Possible career opportunities**

The study of French can open up opportunities in communications, foreign trade and banking, transportation, government, the Foreign Service, tourism, library services, teaching, professional translating, journalism, and all levels of education, including university teaching. Most foreign language careers require more than two years of study.

**Certificate of completion - French**

This certificate prepares students with an intermediate to advanced knowledge of French and familiarizes them with the culture of France and other French-speaking countries.  
To earn a certificate of completion, students must complete each course used to meet a certificate requirement with a “C” grade or better.

Complete 13-16 units from the following list of courses:

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<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>FRNCH 120</td>
<td>5</td>
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<tr>
<td>FRNCH 121</td>
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<tr>
<td>FRNCH 220</td>
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<td>FRNCH 221</td>
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<td>FRNCH 230</td>
<td>3</td>
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<td>FRNCH 231</td>
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</tbody>
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Total units required 13-16

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**FRNCH-155  First Term Conversational French**

3 units  SC  
May be repeated once  
54 hours lecture / 18 hours laboratory by arrangement per term  
Notes: FRNCH 120-121 combined are equivalent in content to FRNCH 145, 146 and 147 combined. This course does not satisfy the academic requirements of the FRNCH 120-121 series or the FRNCH 145,146 and 147 series.  
Instruction in basic speaking, listening, and comprehensive skills. Introduction to simple grammatical structures and vocabulary to enable students to communicate in everyday situations. CSU

**FRNCH-156  Second Term Conversational French**

3 units  SC  
54 hours lecture / 18 hours laboratory by arrangement per term  
Recommended: FRNCH 155 or equivalent  
Note: this course does not satisfy the academic requirements of the FRNCH 120-121 series or the FRNCH 145, 146 and 147 series  
Second term conversational course designed to improve speaking and oral comprehension skills. Building on previously acquired knowledge, it will include a more extensive grammar
and vocabulary to expand beyond the self and onto conversa-
tion of a more general nature. Emphasis will be on oral use of
the language. Comprehension will be reinforced through listen-
ing practice. CSU

FRNCH-157 Third Term Conversational French
3 units SC
54 hours lecture / 18 hours laboratory by arrangement per
term
Recommended: FRNCH 156 or equivalent
Note: this course does not satisfy the academic require-
ments of the FRNCH 120-121 series or the FRNCH 145, 146
and 147 series
This is a third term conversational French course designed to
improve and refine speaking, listening, and comprehensive
skills by reviewing and introducing target vocabulary and gram-
mar. Students will be able to discuss topics of social, political,
and cultural nature. Students will also have the opportunity to
present a well-researched expose on various aspects of French
culture. CSU

FRNCH-220 Third Term French
5 units SC
90 hours lecture / 18 hours laboratory by arrangement per
term
Recommended: FRNCH 121 or equivalent
This course develops a functional fluency in understanding,
speaking, reading and writing French, as well as providing an
introduction to the study of French literature. This is a further
study and interpretation of foreign culture. CAN FREN 8,
FRNCH 220+221 = CAN FREN SEQ B, CSU, UC

FRNCH-221 Fourth Term French
5 units SC
90 hours lecture / 18 hours laboratory by arrangement per
term
Recommended: FRNCH 220 or equivalent
Advanced grammar study and review. Study of francophone lit-
erature in French with emphasis on the short story and poetry.
Cultural study integrated into class discussions. Class conduct-
ed in French. CAN FREN 10, FRNCH 220+221 = CAN FREN
SEQ B, CSU, UC

FRNCH-230 Fifth Term French
3 units SC
54 hours lecture per term
Recommended: FRNCH 221 or equivalent
This is a continuation of FRNCH 221 with intensive study of
additional literary works. There is further development of lan-
guage skills through student preparation and presentation of
reports. This course is conducted entirely in French. CSU, UC

FRNCH-298 Independent Study
.5-3 units SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract
to department and instruction office; topics must extend
beyond courses offered
Selected students may pursue special studies in French under
the guidance of the foreign language faculty. CSU, UC (credit
limits may apply to UC – see counselor)

Geography – GEOG

Physical Sciences and Engineering Division
Dennis Smith, Dean
Physical Sciences Building 261
925-685-1230 x 2359

Possible career opportunities
Geography is an interdisciplinary study focusing on the spatial
relations of physical, cultural and economic systems of our
world. As such, geographers are employed in a wide array of
fields in many capacities such as: city/county planning; survey-
ing; cartography; aerial photographic interpretation; remote
sensing; environmental studies; meteorology; GIS (geographic
information systems: and GPS (global positioning systems).
Geographers are employed by private sector firms, government
and non-profit organizations. Many career options may require
more than two years of college study.
Cultural geography careers include geography education at
many levels, analyst, consultant and planner. Most career
options require more than two years of college study.

Associate in science degree
Geographic information systems/Global positioning
system

Certificate of achievement
Geographic information systems/Global positioning
system

Certificate of completion
Geographic information systems/Global positioning
system

Associate in science degree - Geographic
information systems/Global positioning
system
The associate in science degree program in geographic infor-
mation systems (GIS)/global positioning system (GPS) is
designed to prepare students for entry into careers that employ
generalized or specialized applications of GIS. GIS is a versa-
tile and powerful technology that allows data input, data management, analysis and display of result within a single setup. Most local, state, and federal government agencies use GIS, as do businesses, planners, architects, foresters, geologists and a host of other occupations. Students learn technical and analytical skills for research as well as practical skills necessary to enter the job market and obtain positions with such titles as GIS technician, GIS specialist, GIS analyst, GIS programmer, GIS coordinator, GIS supervisor and GIS manager. To earn a degree, students must complete each course used to meet a major requirement with a “C” grade or better. Certain courses may satisfy both a major and a DVC general education requirement; however the units are only counted once.

**Certificate of achievement - Geographic information systems/Global positioning system**

The geographic information systems (GIS)/global positioning system (GPS) program is designed to prepare students for entry into careers that employ generalized or specialized applications of GIS. GIS is a versatile and powerful technology that allows data input, data management, analysis and display of result within a single setup. Most local, state, and federal government agencies use GIS, as do businesses, planners, architects, foresters, geologists and a host of other occupations. Students learn technical and analytical skills for research as well as practical skills necessary to enter the job market and obtain positions with such titles as GIS technician, GIS specialist, GIS analyst, GIS programmer, GIS coordinator, GIS supervisor and GIS manager. To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better. Required courses are available in the evening and during the day.

**required courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>GEOG 125</td>
<td>Introduction to GIS</td>
</tr>
<tr>
<td>GEOG 126</td>
<td>Advanced GIS</td>
</tr>
<tr>
<td>GEOG 127</td>
<td>Introduction to GPS</td>
</tr>
<tr>
<td>GEOG 128</td>
<td>Advanced GPS</td>
</tr>
<tr>
<td>GEOG 160</td>
<td>Remote Sensing</td>
</tr>
<tr>
<td>GEOG 162</td>
<td>Maps and Cartography</td>
</tr>
</tbody>
</table>

**plus at least 6 units from:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>COMSC 100</td>
<td>Introduction to Computer and Information Systems</td>
</tr>
<tr>
<td>COMSC 100L</td>
<td>Introduction to Computer Software</td>
</tr>
<tr>
<td>COMSC 110</td>
<td>Introduction to Programming</td>
</tr>
<tr>
<td>COMSC 138</td>
<td>Using Visual Basic for Applications</td>
</tr>
<tr>
<td>COMSC 172</td>
<td>UNIX and Linux Installation and Local Administration</td>
</tr>
<tr>
<td>COMSC 245</td>
<td>Programming with Visual Basic.NET</td>
</tr>
<tr>
<td>COMSC 255</td>
<td>Programming with Java</td>
</tr>
</tbody>
</table>

**plus at least 6 units from:**

<table>
<thead>
<tr>
<th>Course</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ANTHR 126</td>
<td>Introduction to Archeological Field Methods</td>
</tr>
<tr>
<td>BIOSC 126</td>
<td>Nature Study and Conservation</td>
</tr>
<tr>
<td>BIOSC 170</td>
<td>Environmental Science</td>
</tr>
<tr>
<td>BUSMK 148</td>
<td>Retailing and Merchandising</td>
</tr>
<tr>
<td>COOP 170</td>
<td>Occupational Work Experience</td>
</tr>
<tr>
<td>ENGIN 126</td>
<td>Computer Aided Design and Drafting – AutoCAD</td>
</tr>
<tr>
<td>GEOG 120</td>
<td>Introduction to Physical Geography</td>
</tr>
<tr>
<td>GEOL 120</td>
<td>Introduction to Physical Geology</td>
</tr>
</tbody>
</table>

**Total units required** 31

**Certificate of completion - Geographic information systems/Global positioning system**

The geographic information systems (GIS)/global positioning system (GPS) program is designed to prepare students for entry into careers that employ generalized or specialized applications of GIS. GIS is a versatile and powerful technology that allows data input, data management, analysis and display of result within a single setup. Most local, state, and federal government agencies use GIS, as do businesses, planners, architects, foresters, geologists and a host of other occupations. Students learn technical and analytical skills for research as well as practical skills necessary to enter the job market and obtain positions with such titles as GIS technician, GIS specialist, GIS analyst, GIS programmer, GIS coordinator, GIS supervisor and GIS manager.
To earn a certificate of completion or achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better. Required courses are available in the evening and during the day.

required courses                      units
GEOG 125  Introduction to GIS          3
GEOG 126  Advanced GIS                 3
GEOG 127  Introduction to GPS           3
GEOG 128  Advanced GPS                 3

plus at least 3 units from:
ANTHR 126  Introduction to Archeological Field  Methods                             3
BIOBSC 126  Nature Study and Conservation  Environmental Science              4
BIOBSC 170  Environmental Science       3
BUSMK 148  Retailing and Merchandising      3
COMSC 100L  Introduction to Computer Software  1
COOP 170   Occupational Work Experience  1-3
ENGIN 126  Computer Aided Design and Drafting – AutoCAD  4
GEOG 120  Physical Geography            3
GEOG 121  Physical Geography Lab        1
GEOG 162  Maps and Cartography          3
GEOG 298  Independent Study             1-3
GEOL 120  Physical Geology              3
GEOL 122  Physical Geology Lab          1

Total units required                  15

GEOG-120  Physical Geography
3 units LR
54 hours lecture per term
Prerequisite: MATH 110 or one year of high school algebra or appropriate placement through the assessment process.
A general course to introduce the fundamental principles of physical geography. This course is intended to provide an intelligent understanding of the Earth as the home of human beings and to show the interrelationships found within the physical environment. Quantitative reasoning, development of mathematical concepts and problem solving are emphasized. CAN GEOG 2. CSU, UC

GEOG-121  Physical Geography Lab
1 unit LR
54 hours laboratory per term
Co-requisite: GEOG 120 or equivalent
Note: field trips may be included in the course
A laboratory course to supplement a course in general or physical geography. The materials of the Earth, internal structure and dynamic processes will be covered. CSU, UC

GEOG-125  Introduction to Geographic Information System (GIS)
3 units LR
54 hours lecture / 18 hours laboratory per term
Recommended: CIS 050 or equivalent
An introduction to Geographic Information Systems (GIS) as a tool for spatial analysis. The course will cover GIS concepts, techniques and methodologies. Laboratory activities will be used to reinforce lecture concepts. The course will prepare students for advanced university level courses in spatial analysis or for entry level positions in GIS related fields. CSU

GEOG-126  Advanced Geographic Information Systems
3 units LR
54 hours lecture / 18 hours laboratory per term
Prerequisite: GEOG 125
Application of advanced analytical techniques of geographic information systems (GIS) to manipulate, analyze and predict spatial patterns. Students will work on individual projects to learn the issues involved in managing and representing spatial information. CSU

GEOG-127  Introduction to Global Positioning Systems
3 units LR
54 hours lecture per term
An introduction to the Global Positioning System (GPS). Development of the GPS, operational characteristics, limitations, potential errors and applications will be covered. Activities with GPS receivers will be required. This course will prepare students for advanced course work in the GPS or for course work in Geographic Information Systems. CSU

GEOG-128  Advanced Global Positioning Systems
3 units LR
54 hours lecture per term
Prerequisite: GEOG 127 or equivalent
An advanced course on the Global Positioning System (GPS). Advanced topics including data dictionaries, differential GPS and linking GPS to Geographic Information Systems will be covered. This course will prepare students for additional studies in specific applications of GPS or for course work in Geographic Information Systems. In addition, skills obtained in this course may allow students to seek employment in the spatial science field. CSU

GEOG-130  Cultural Geography
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
The nature and causes of the spatial distribution of human activity. Phenomena such as population, language, religion, popular culture, agricultural practices, political structure, economic organization, settlement patterns, resource exploration, and technological innovation are examined in order to understand the interactive relationship between human beings and their environment. CAN GEOG 4, CSU, UC
### GEOG-140 Introduction to Weather
3 units SC
54 hours lecture per term
**Recommended:** It is strongly recommended that students have successfully completed MATH 110 (or equivalent) prior to taking this course.

An introductory course in Meteorology that is both a descriptive and analytical course on the physical principles affecting the earth’s weather. Topics covered include the nature of the atmosphere, solar energy, heat, temperature, pressure, stability, moisture, wind, storms, severe weather and forecasting. The course introduces Climatology as a scientific study and will look at Earth’s climatic history. The course will also look at current research in climate modeling and the possibility of global climate change. CSU, UC

### GEOG-141 Introduction to Weather Laboratory
1 unit LR
54 hours laboratory per term
**Prerequisite:** concurrent enrollment in, or successful completion of, GEOG 140.
**Recommended:** MATH 110 or equivalent

A laboratory course to supplement GEOG 140 (Introduction to Weather). Fundamental concepts in meteorology and measurement techniques including selected mathematical concepts used in developing an understanding of weather and climate. Analysis of real-time weather data will be stressed. CSU, UC

### GEOG-150 Topics in Geography
.5-3 units LR
**May be repeated three times**
Variable hours

An in-depth study of selected subjects in geography. The topics to be offered each term will be indicated in the current course schedule. CSU, UC (credit limits may apply to UC – see counselor)

### GEOG-160 Introduction to Remote Sensing
4 units LR
54 hours lecture / 54 hours laboratory per term
**Recommended:** COMSC 100L or equivalent

This course introduces the basic principles of remote sensing techniques including aerial photographs, satellite images and radar imagers. It explains how these techniques are used for collecting data about the earth and how such data can be interpreted and mapped with the help of image processing software and geographic information systems. CSU

### GEOG-162 Maps and Cartography
3 units LR
36 hours lecture / 54 hours laboratory per term
**Recommended:** MATH 110 or equivalent

The course introduces basic principles of mapping and representation of spatial data using conventional and computerized cartographic techniques. Elements of map such as scale, distance, direction, and map projections as well as cartographic techniques of data analysis, processing, symbolization, and representation are examined in detail. This course is designed to develop a better understanding of maps and map-interpretation. CSU

### GEOG-298 Independent Study
.5-3 units SC
**May be repeated three times**
Variable hours

**Prerequisite:** submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered.

An opportunity for advanced students to study special interests under the direction of the faculty. CSU, UC (credit limits may apply to UC – see counselor)
GEOL-122  Physical Geology Laboratory  
1 unit  LR
54 hours laboratory per term
Co-requisite: GEOL 120 or 121 or equivalent (may be taken previously).
Recommended: Math 110 or equivalent
Note: field trips may be included in the course
A laboratory course to supplement a course in general or physical geology. The materials of the Earth, internal structure and dynamic processes will be covered. GEOL 120+122=CAN
GEOL 2, CSU, UC

GEOL-124  Earth and Life Through Time lab  
1 unit  LR
54 hours laboratory per term
Prerequisite: GEOL 121 or equivalent (may be taken concurrently)
A laboratory course in the techniques of historical geological investigations. GEOL 121+124 = CAN GEOL 4, CSU, UC

GEOL-125  Geology of California  
3 units  LR
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
Note: A field trip may be required.
This course is designed to familiarize students with the varied geological, topographical and geographical aspects of California. This will include a general study of the provinces of California, the major rock types and their occurrence, the major earthquake faults and their frequency of activity, and the general geologic history. Mineral and petroleum resources of the state will be discussed. CSU, UC

GEOL-298  Independent Study  
.5-3 units  SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered.
An opportunity for advanced students to study special interests under direction of the faculty. CSU, UC (credit limits may apply to UC - see counselor)

Certificate of completion - German  
This certificate prepares students with an intermediate to advanced knowledge of German and familiarizes them with the culture of Germany and other German-speaking countries.

Possible career opportunities
The study of German can open up opportunities in communications, foreign trade and banking, transportation, government, the Foreign Service, tourism, library services, teaching, professional translating, journalism, and all levels of education, including university teaching. Most foreign language careers require more than two years of study.

A field trip may be required.

Certificate of completion - German  
This certificate prepares students with an intermediate to advanced knowledge of German and familiarizes them with the culture of Germany and other German-speaking countries.

To earn a certificate of completion, students must complete each course used to meet a certificate with a “C” grade or better.

GEOL-122  Physical Geology Laboratory  
1 unit  LR
54 hours laboratory per term
Co-requisite: GEOL 120 or 121 or equivalent (may be taken previously).
Recommended: Math 110 or equivalent
Note: field trips may be included in the course
A laboratory course to supplement a course in general or physical geology. The materials of the Earth, internal structure and dynamic processes will be covered. GEOL 120+122=CAN
GEOL 2, CSU, UC

GEOL-124  Earth and Life Through Time lab  
1 unit  LR
54 hours laboratory per term
Prerequisite: GEOL 121 or equivalent (may be taken concurrently)
A laboratory course in the techniques of historical geological investigations. GEOL 121+124 = CAN GEOL 4, CSU, UC

GEOL-125  Geology of California  
3 units  LR
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
Note: A field trip may be required.
This course is designed to familiarize students with the varied geological, topographical and geographical aspects of California. This will include a general study of the provinces of California, the major rock types and their occurrence, the major earthquake faults and their frequency of activity, and the general geologic history. Mineral and petroleum resources of the state will be discussed. CSU, UC

GEOL-298  Independent Study  
.5-3 units  SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered.
An opportunity for advanced students to study special interests under direction of the faculty. CSU, UC (credit limits may apply to UC - see counselor)

Students with prior foreign language instruction should check with a language teacher regarding proper placement in foreign language courses. The following system is generally used to determine the appropriate term of college work based on high school language: two years equal one college term; three years equal two college term; four years equal three college terms.
**GRMAN-121 Second Term German**

5 units SC
90 hours lecture / 18 hours laboratory by arrangement per term

*Recommended: GRMAN 120 or equivalent*

*Note: GRMAN 120 and 121 combined are equivalent in content to GRMAN 145, 146 and 147 combined*

Second semester of basic German. Emphasis is on communicative skills: vocabulary expansion, idioms, writing, and completion of a basic grammar overview. Study of culture, history, and geography of the German-speaking countries through the Focus Deutsch video and audio program. CAN GERM 4. GRMAN 120+121 = CAN GERM SEQ A, CSU, UC (credit limits may apply to UC – see counselor)

**GRMAN-145 First Trimester German**

3 units SC
54 hours lecture / 18 hours laboratory by arrangement per term

*Note: GRMAN 120 and 121 combined are equivalent in content to GRMAN 145, 146 and 147 combined*

First term of a trimester course in beginning German. The student is introduced to the sounds and structures of the German language. A video and audio tapes provide cultural and historical background and expose the student to everyday spoken German. CSU, UC (credit limits may apply to UC – see counselor)

**GRMAN-146 Second Trimester German**

3 units SC
54 hours lecture / 18 hours laboratory by arrangement per term

*Recommended: GRMAN 145 or equivalent*

*Note: GRMAN 120 and 121 combined are equivalent in content to GRMAN 145, 146 and 147 combined*

This course in beginning German (level 2 of 3) continues to introduce the student to basic German grammar, vocabulary, and sentence structure. In the communicative approach employed, equal time is given to conversational, writing, and reading skills. With the aid of a video and audio program students are exposed to everyday language and life in the German speaking countries. CSU, UC (credit limits may apply to UC – see counselor)

**GRMAN-147 Third Trimester German**

3 units SC
54 hours lecture / 18 hours laboratory by arrangement per term

*Recommended: GRMAN 146 or equivalent*

*Note: GRMAN 120 and 121 combined are equivalent in content to GRMAN 145, 146 and 147 combined*

Third trimester of a first-year German course. By the end of the term the student will be familiar with basic vocabulary, idioms, and grammar in order to speak, read, and write simple German. As in GRMAN 145 and 146, a video and audio program provides variety, color, and cultural and historical background. CSU, UC (credit limits may apply to UC – see counselor)

**GRMAN-150 Topics in German**

.3-.4 units SC

*May be repeated three times*

*Variable hours*

A supplemental course in German to provide a study of current concepts and problems in German and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

**GRMAN-155 First Term Beginning Conversational German**

3 units SC

*May be repeated once*

54 hours lecture / 18 hours laboratory by arrangement per term

This is the first term of the beginning German conversation series. It is a participatory class based on practical material with oral-aural practice. The present tense is emphasized, and covers basic vocabulary and cultural material. CSU

**GRMAN-156 Second Term Beginning Conversational German**

3 units SC

54 hours lecture / 18 hours laboratory by arrangement per term

*Recommended: GRMAN 155 or equivalent*

This is the second term of the beginning German conversation series. It is a participatory class based on practical material with oral-aural practice. The present perfect and simple past tenses are introduced and contrasted. New vocabulary and cultural material are presented. CSU

**GRMAN-157 Third Term Beginning Conversational German**

3 units SC

54 hours lecture / 18 hours laboratory by arrangement per term

*Recommended: GRMAN 156 or equivalent*

This is third term of the beginning German conversation series. It is a participatory class based on practical material with oral-aural practice. The present perfect and simple past tenses are reviewed and practiced. Subjective, passive voice, and modal are introduced. New vocabulary and cultural material are presented. CSU

**GRMAN-220 Third Term German**

5 units SC
90 hours lecture / 18 hours laboratory by arrangement per term

*Recommended: GRMAN 121 or equivalent*

Intermediate German. Expand conversation skills, emphasizing speaking more fluently and with assurance. A grammar review and development of reading and writing skills. Short stories, video, and audio programs provide a rich basis for conversation, discussion, and cultural insights. CAN GERM 8, GRMAN 220+221 = CAN GERM SEQ B, CSU, UC
GRMAN-221 Fourth Term German
5 units SC
90 hours lecture / 18 hours laboratory by arrangement per term
Recommended: GRMAN 220 or equivalent
Intermediate German. This course is a continuation of GRMAN 220. Completion of a grammar review and exposure to the finer points of the language, such as particles and when and how to use indirect discourse. The video program exposes the student to many aspects of life in Austria, Germany, and Switzerland, including the various accents of the native speakers. CAN GERM 10, GRMAN 220+221 = CAN GERM SEQ B, CSU, UC

GRMAN-230 Fifth Term German
3 units SC
54 hours lecture per term
Recommended: GRMAN 221 or equivalent
Advanced German. Students refine their knowledge of German and their insights into the culture of the German speaking countries through contemporary literature, popular writings, such as magazines, advertisements, videos, and film. Many group activities and projects, with an emphasis on communicative skills. CSU, UC

GRMAN-231 Sixth Term German
3 units SC
54 hours lecture per term
Recommended: GRMAN 220 or equivalent
Intensive study of selected literary works (prose, poetry, drama) from the German speaking countries. Students deal critically with both the language and the content of the readings. Exploration of different writing styles and oral communication, such as debates, oratory, jokes, and storytelling. CSU, UC

GERON 100 Adult Development and Aging
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 equivalent
This course presents theories of adult development and social gerontology. An overview of the physical, psychological, and social aspects of aging are covered in this course. Interactions between elders and other members of society are addressed, as are stereotypes and images associated with older people. Social bonds, friendship, intimacy and sexuality, physical and mental health, death, dying and bereavement, are some of the topics presented. CSU

GERON 150 Topics in Gerontology
3-4 units SC
May be repeated three times
Variable hours
A supplemental course in Gerontology designed to provide a study of current topics and issues pertaining to the elder community. Specific topics will be announced in the schedule of courses. CSU

Health science – HSCI
Diablo Valley College is approved by the California Board of Registered Nurses for continuing education credits (provider #CEP 7992) Health Science courses which can be used are HSCI 124, 140, 164 and 170

Biological and Health Science Division
Dean of Biological and Health Sciences
Science Center Building 102
925-685-1230 x 2442

Possible career opportunities
A health science graduate may work in federal, state or county health agencies, community clinics, voluntary health agencies and hospitals, insurance or pharmaceutical companies.

HSCI-124 Health and Wellness
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
Note: the nutrition, tobacco and substance abuse components of this course fulfill a portion of the state health education requirements for a teaching credential. For CPR training see HSCI 131
An overview of all aspects of health and wellness, including physical, mental, spiritual, emotional, social dimensions. The course examines current scientific research or methods of improving total health. CSU, UC (credit limits may apply to UC – see counselor)
HSCI-125 Consumer Health
3 units SC  
54 hours lecture per term  
Recommended: eligibility for ENGL 122 or equivalent  
This course is designed to examine consumer aspects of health and medical care in contemporary society. Course study will include topics such as evaluating health care delivery systems, health care providers, and health insurance plans. Students will also learn how to critically assess health information and health-related services and products, as well as where to obtain health information, services and products. CSU

HSCI-126 Stress Management and Health
3 units SC  
54 hours lecture per term  
Recommended: eligibility for ENGL 122 or equivalent  
This course will examine the theoretical frameworks of stress research and common stress management techniques. Topics of study will include defining stress, understanding physiological theories of stress, defining sources and causes of stress, and examining health consequences of chronic stress. Students will examine and analyze numerous strategies to manage and cope with stress such as: time management, relaxation techniques, communication skills, diet and exercise. CSU

HSCI-127 Drugs, Health and Society
3 units SC  
54 hours lecture per term  
Recommended: eligibility for ENGL 122 or equivalent  
This course will be an in depth study of drug use in our society, particularly the most commonly used and abused drugs. This course will examine the common uses and health effects of drugs such as: over the counter remedies, prescription drugs, herbal remedies, recreational drugs and illicit drugs. CSU, UC

HSCI-131 Cardiopulmonary Resuscitation (CPR)
.5 unit SC  
9 hours lecture / 3 hours laboratory per term  
Recommended: eligibility for ENGL 122 or equivalent  
This course is designed to teach lifesaving skills to be used in respiratory and cardiac emergencies. CSU

HSCI-140 Human Sexuality
3 units SC  
54 hours lecture per term  
Recommended: eligibility for ENGL 122 or equivalent  
This is an introductory course examining human sexuality from a biological and cross-cultural perspective. Historical and traditional influences, as well as current perspectives will be presented. This course will facilitate students’ knowledge of each other’s cultures and traditions as they relate to sexuality. Topics that will be examined include sexual anatomy and physiology, gender issues, sex research, relationships and intimacy, communication, sexual behaviors, sexual orientation, sexual minorities, contraception, abortion, sexually transmitted diseases, and enhancing sexual fulfillment. CSU, UC

HSCI-150 Topics in Health Science
.3-.4 units SC  
May be repeated three times  
Variable hours  
Recommended: eligibility for ENGL 122 or equivalent  
A supplemental course in the Health Sciences which provides additional study of current concepts and problems in health and their related subdivisions. Specific topics will be announced in the schedule of courses. CSU, UC (credit limits may apply to UC – see counselor)

HSCI-164 Mind Body Healing: Cross-Cultural Perspectives
3 units SC  
54 hours lecture per term  
Recommended: eligibility for ENGL 122 or equivalent  
Note: Continuing Education Units (CEU's) for nurses  
This course will examine the theory that a mind-body connection is related to health, disease, and healing. The principles of many healing traditions and cultures will be compared to current western scientific research which suggests that a mind-body connection exists. CSU

HSCI-170 Women's Health
3 units SC  
54 hours lecture per term  
Recommended: eligibility for ENGL 122 or equivalent  
An exploration of the biological, sociopolitical, and psychological aspects of women's health and medical care in contemporary society. The course examines current scientific knowledge and human behavior as it relates to health issues of particular concern to women such as self-health, reproductive management, menopause, nutrition, health research, breast cancer, infectious disease and stress. CSU, UC (credit limits may apply to UC – see counselor)

HSCI-230 Advanced First Aid / CPR
3 units SC  
May be repeated three times  
54 hours lecture per term  
Recommended: eligibility for ENGL 122 or equivalent  
Note: Continuing Education Units (CEU's) for nurses  
An advanced survey of emergency and non-emergency procedures and techniques used in the pre-hospital setting including basic life support CPR and first aid. This course is required training for medical professionals. CAN KINE/PE 8, CSU

HSCI-298 Independent Study
.5-.3 units SC  
May be repeated three times  
Variable hours  
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend beyond courses offered.  
Recommended: eligibility for ENGL 122 or equivalent  
An opportunity for advanced students to study special interests under the direction of the faculty. CSU
Possible career opportunities
The study of history contributes to cultural literacy and develops critical thinking and other useful skills for a broad range of careers including education, public service and law. Most career options require more than two years of college study.

HIST-120 History of the United States Before 1877
3 units SC
54 hours lecture per term
Required: eligibility for ENGL 122 or equivalent
A history of the United States before 1877. This course examines cultural, economic, political, and social factors and includes the experiences and contributions of Native American, African, Asian, Mexican/Latino and European men and women in the development of American society. The course will treat origins, nature, and impact of U.S. Constitution on American history before 1877 including the political philosophies of the framers, the operation of political institutions, and the rights and obligations of citizens. CAN HIST 8, HIST 120+121 = CAN HIST SEQ B, CSU, UC (credit limits may apply to UC – see counselor)

HIST-121 History of the United States After 1877
3 units SC
54 hours lecture per term
Required: eligibility for ENGL 122 or equivalent
This course continues with the history of the United States from 1877 to the present. The course examines cultural, economic, social, and political factors, including the operation and continuing evolution of local, state and federal governments under the U.S. and California Constitutions, and deals with the experiences of men and women from diverse backgrounds, including Euro-Americans, Asian-Americans, African-Americans, Native Americans and Mexican American/Latinas/os. In addition, this course will examine the international role of the United States during the 20th century. CAN HIST 10, HIST 120+121 = CAN HIST SEQ B, CSU, UC (credit limits may apply to UC – see counselor)

HIST-122 Critical Reasoning in History
3 units SC
54 hours lecture per term
Prerequisite: ENGL 122
Critical reasoning in history is a process of questioning, analyzing, and evaluating oral and written ideas, concepts, and interpretation of the past. This process will include an introduction to the principles of inductive and deductive reasoning. The goal is to learn how to identify historical viewpoints, gather and organize historical information, recognize historical relationships and patterns, and see the relevancy of historical insights as background for an understanding of current events and issues. To achieve this goal, critical reasoning in history involves an understanding and practice of certain definable skills. CSU, UC

HIST-124 History of California
3 units SC
54 hours lecture per term
Required: eligibility for ENGL 122 or equivalent
This course is a survey of the history of California, including the culture of the native Indian people, the Hispanic and early American settlement of California. The course also covers the California constitution, the formation and growth of state and local government, the social, political, economic and cultural forces in the growth of modern California with special emphasis on the state’s ethnic diversity. CSU, UC

HIST-125 History of the United States: A Mexican American Perspective
3 units SC
54 hours lecture per term
Required: eligibility for ENGL 122 or equivalent
This course covers U.S. history from 1848 to the present with an emphasis on the role of Mexican-origin people, both immigrants and U.S. born. It examines the history from a social, political, economic, and cultural perspective. It emphasizes the contributions of Mexican-origin people to the multicultural development of contemporary American society, including their interaction with other Latino communities, as well as people of European, African, Asian, and Native descent. The impact of U.S. attitudes and policies on Mexican-origin peoples is also addressed. CSU, UC

HIST-126 The American West
3 units SC
54 hours lecture per term
Required: eligibility for ENGL 122 or equivalent
This course is a survey of the American people from the Atlantic seaboard across North America and into the Pacific. Focusing on the Westward Movement during the nineteenth century, it examines this historical experience from a social, political, economic, and cultural perspective up to the present. It emphasizes, too, the role of the diverse ethnic and racial communities of the West and their interaction with one another, as well as their contributions to the construction of the American national character. CSU, UC

HIST-127 African American Perspective History of The United States to 1865
3 units SC
54 hours lecture per term
Required: eligibility for ENGL 122 or equivalent
This course is a survey of the United States from the perspective of African Americans, comparing the African experience with the experiences of Europeans, Native Americans, Asian Americans and Hispanics. Part of the course will be devoted to the U.S. government and the Constitution, the California government and Constitution, and other constitutional models for comparison and contrast. The course will examine the early African
presence in America, the origins of the slave trade, and explore political, economic, demographic and cultural influences shaping African American life and culture prior to 1865. CSU, UC (credit limits may apply to UC – see counselor)

HIST-128 African American Perspective History of The United States after 1865
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course is a survey of the history of the United States from the perspective of African Americans comparing the African American experience with the experiences of Native peoples, Europeans, Asian Americans and Hispanics/Latinos after 1865. The course explores the history of African American economic, cultural, institutional, political, and protest traditions from the post-Civil War period to the present. It also includes African American interaction with national, California state and local governments, especially with respect to the California Constitution. CSU, UC (credit limits may apply to UC – see counselor)

HIST-129 History of Asians and Pacific Islanders in the United States
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
An historical survey of the United States from 1840 to the present, with an emphasis on the Asian and Pacific Islander experience. The course focuses on the major periods of national development such as the Civil War, Reconstruction, Industrialization, Age of Reform, Great Depression, World Wars, Cold War and Vietnam, and Age of Conflict and Reform. Within this broad context, the course will also examine the perspective, developments, increasing diversity of ethnic groups, and contributions of Asians and Pacific Islanders in the United States with an emphasis on California. CSU

HIST-130 History of the Peoples of North America Until The Late 19th Century
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
A survey of the interaction of Native Americans, Europeans, and Africans in North America from the establishment of the first European colonies until the late 19th century. Emphasis will be placed on the diversity of Native American and West African cultures at the time of first contact with Europeans; the different motives and circumstances of Spanish, French, and English colonization in North America; the development of different patterns of interaction between North Americans, Europeans, and Africans in Mexico, Canada, and the United States; the development and evolution of Native American-European-African interaction in Colonial America and the new United States until 1890; and the legal-constitutional framework shaping this interaction, especially the Constitution of the U.S. and its 19th-century judicial interpretation. CSU, UC

HIST-134 California Travel Study: An Individualized Approach
1 unit CR/NC
May be repeated three times
10 hours lecture / 18 hours laboratory per term
Recommended: eligibility for ENGL 122
Note: Each of the three sections of History 134 may be devoted to any one of the three available tours. Students may choose one of the following: The California Missions: Myth and Reality; In Pursuit of Jack London; or Historic Sacramento.
An in-depth investigation of selected topics in California history. Students will complete the course by following a set of printed course instructions, traveling to historic sites in the state, listening to prerecorded lectures about the sites, and completing a written evaluation of the sites. See schedule of courses for topics offered. CSU

HIST-135 History of Latin America - The Colonial Period
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
Early Latin American history from pre-Columbian indigenous cultures through the early-nineteenth century independence movements. The course examines how geography, the encounter between pre-Columbian cultures and Spanish/Portuguese Colonialism, the introduction of African slavery, and the movements for independence shaped Latin America and its inhabitants. CSU, UC

HIST-136 History of Latin America - The National Period
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
The history of Latin America during the National period. Emphasis is on the development of constitutional government, cultural and racial conditions, economic and social changes, and external relations among these countries and with the larger world. The history of all Latin America is surveyed. CSU, UC

HIST-140 History of Western Civilization to the Renaissance
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
This history of western civilization to the 17th century. Emphasis is upon developing an understanding of modern civilization by tracing political, economic, social, cultural, and intellectual developments and relationships of the past. CAN HIST 2 HIST 140-141 = CAN HIST SEQ A, CSU, UC

HIST-141 History of Western Civilization Since the Renaissance
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
The history of western civilization from the 17th century to the present time. Emphasis is on understanding how the structures
and outlook of modern civilization emerged by tracing political, economic, social, cultural, and intellectual developments from late medieval to contemporary times, with primary emphasis on developments of modern Europe. CAN HIST 4 HIST 140+141 = CAN HIST SEQ A, CSU, UC

HIST-150 History of East Asia (to 1600)
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
History of East Asia, with emphasis on China and Japan, from pre-historical times to the beginning of the 17th century. CSU, UC

HIST-151 History of East Asia (from 1600 - Present)
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
History of East Asia, with emphasis on China and Japan, from the 17th century to the present. Particular attention is given to the development of relations with the United States during the 20th century. CSU, UC

HIST-155 Topics in History
1-3 units SC
May be repeated three times
Variable hours
An in-depth study of selected subjects in history. These subjects may be in the realm of cultural, economic, intellectual, political, or social history as indicated in current schedule of courses. CSU, UC (credit limits may apply to UC – see counselor)

HIST-160 British Life and Culture
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
This course is designed to introduce the student to British life and culture through a combination of lectures, visits, and readings. HIST 160 will be taught at the London Study Center and will be required of all students in the London Program. CSU

HIST-170 History of Women in the United States (Pre-Colonial - 1877)
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course is a survey of United States history (pre-colonial-1877) emphasizing women’s life experiences within the context of larger historical changes. The course will examine the commonalities of women’s experience based on their gender and the differences among women based on their race, ethnicity, class, and region. The course will explore how women fostered and were affected by social, political, economic, and cultural transformations. The course will consider the impact of the U.S. and California Constitutions and the activities of federal, state, and local governments on the experience of women. CSU, UC (credit limits may apply to UC – see counselor)

HIST-171 History of Women in the United States (1877-Present)
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course is a survey of United States history (1877-present) emphasizing women’s life experiences within the context of larger historical changes. The course will also examine the commonalities of women’s experience based on their gender and the differences among women based on their race, ethnicity, class, and region. The course will explore how women fostered and were affected by the industrialization, secularization and urbanization of the United States, and the development of the United States as a world power. Women’s abilities to mobilize and change the political institutions and the Constitution will be a main theme. CSU, UC (credit limits may apply to UC – see counselor)

HIST-240 Contemporary Europe
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
A study of the political, social, and cultural developments in recent European history. Topics include World War I and the consequences of Versailles, the Bolshevik Revolution and the rise of Communism, Italian Fascism, and German Nazism, the diplomacy of World War II, the Cold War, and current developments in Europe. CSU, UC

HIST-298 Independent Study
5-3 units SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered.
An opportunity for students to study special interests under direction of the faculty. CSU, UC (credit limits may apply to UC – see counselor)

Horticulture – HORT

Biological and Health Science Division
Dean of Biological and Health Sciences
Science Center Building 102
925-685-1230 x 2442

Possible career opportunities
The horticulture program prepares students for numerous state licenses and industry certificates. State licenses include landscape contractor and pest control operator. Industry certifications include: nursery person, arborist, landscape technician, maintenance technician, and irrigation designer. Career choices in horticulture include: nursery technician, propagator, plant breeder, nursery manager, greenhouse grower, greenhouse manager, garden center manager, arborist/tree worker, land-
landscape architect, landscape designer, grounds manager/municipal, landscape contractor, landscape maintenance contractor, golf course manager, and pest controller/advisor. Some career options may require more than two year of college work.

Certificate of achievement
Horticulture
Landscape Construction
Landscape Design
Landscape Maintenance

Certificate of achievement - Horticulture
This broad program prepares students for employment in plant production, pest management and retail nurseries. It will assist students preparing to take the California Association of Nurseyperson’s exam and the arboriculture certification exam.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better. Required courses are available in the evening and on weekends.

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 110 Introduction to Horticulture</td>
<td>4</td>
</tr>
<tr>
<td>HORT 141 Tree Identification</td>
<td>3</td>
</tr>
<tr>
<td>HORT 143 Shrub Identification</td>
<td>3</td>
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<tr>
<td>HORT 145 Groundcovers and Vines Identification</td>
<td>3</td>
</tr>
<tr>
<td>HORT 147 Annuals and Perennials Identification</td>
<td>3</td>
</tr>
<tr>
<td>HORT 161 Plant Pests and Diseases</td>
<td>3</td>
</tr>
<tr>
<td>HORT 164 Soil Science and Management</td>
<td>3</td>
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<tr>
<td>HORT 179 Arboriculture</td>
<td>3</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>plus at least 3 units from:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>HORT 140 Basic Plant Taxonomy</td>
<td>3</td>
</tr>
<tr>
<td>HORT 160 Plant Propagation</td>
<td>3</td>
</tr>
<tr>
<td>HORT 164L Soil Science Propagation</td>
<td>1</td>
</tr>
<tr>
<td>HORT 298 Independent Study</td>
<td>0.5-3</td>
</tr>
</tbody>
</table>

Total units required: 25

Certificate of achievement - Landscape design
This program prepares students for entry-level positions in landscape architecture offices. Elements of the program will assist students to prepare for the California Association of Nurseyperson’s certification examination. Students will develop portfolios that may be necessary for entrance into landscape design baccalaureate degree programs at University of California, Davis, California Polytechnic State University at San Luis Obispo, and Pomona.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better. Required courses are available in the evening and on weekends.

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<td>HORT 145 Groundcovers and Vines Identification</td>
<td>3</td>
</tr>
<tr>
<td>HORT 147 Annuals and Perennials Identification</td>
<td>3</td>
</tr>
<tr>
<td>HORT 164 Soil Science and Management</td>
<td>3</td>
</tr>
<tr>
<td>HORT 174 Landscape Design</td>
<td>3</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>plus at least 3 units from:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 150 Selected Topics in Horticulture</td>
<td>0.3-4</td>
</tr>
</tbody>
</table>

Total units required: 31
Certificate of achievement - Landscape maintenance

Students are prepared for positions in the landscape maintenance field and for the California Landscape Contractors Association’s CLTM examination. Elements of the program will also assist students preparing for the California Association of Nurseryperson's certification examination.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a "C" grade or better. Required courses are available in the evening and on weekends.

required courses

<table>
<thead>
<tr>
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<td>Annuals and Perennials Identification</td>
<td>3</td>
</tr>
<tr>
<td>HORT 161</td>
<td>Plant Pests and Diseases</td>
<td>3</td>
</tr>
<tr>
<td>HORT 164</td>
<td>Soil Science and Management</td>
<td>3</td>
</tr>
<tr>
<td>HORT 177</td>
<td>Landscape Irrigation Installation</td>
<td>3</td>
</tr>
<tr>
<td>HORT 179</td>
<td>Arboriculture</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units required: 31

plus at least 3 units from:

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>HORT 170</td>
<td>Landscape Drafting</td>
<td>3</td>
</tr>
<tr>
<td>HORT 179L</td>
<td>Arboriculture Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>HORT 298</td>
<td>Independent Study</td>
<td>0.5-3</td>
</tr>
</tbody>
</table>

Total units required: 31

recommended courses

For students with less than one year of full-time industry work experience.

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>HORT 141L</td>
<td>Tree Identification Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>HORT 143L</td>
<td>Shrub Identification Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>HORT 147L</td>
<td>Annuals and Perennials Identification Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

Horticulture Nursery and they will learn pre-vocational and vocational training skills associated with nursery production and nursery management.

HORT-092NC Adaptive Horticulture - Nursery Skills and Practices

0 unit
May be repeated
Not degree applicable
108 hours laboratory per term
Note: this is an open entry/open exit course.

A horticultural and vocational training class adapted for students with special needs. Students will learn landscape prevocational and vocational training skills for a garden, residential, and commercial setting.

HORT-110 Introduction to Horticulture

4 units SC
54 hours lecture / 54 hours laboratory per term
Recommended: eligibility for ENGL 122, or equivalent

Introduction to horticulture explores the biology and economics of growing and care for plants. The course covers the breadth of basic horticulture practices and the biological and environmental principles on which they are used. The students are exposed to a variety of field studies that stress the practical applications of horticulture science: propagation, plant identification, pest/disease identification and control options, environmentally safe use of pesticides, and factors for favorable plant growth. There will be an overview to the different aspects of the horticulture industry. CSU, UC

HORT-115 Plant Terminology

3 units SC
54 hours lecture per term
Recommended: HORT 110; eligibility for ENGL 122

This class covers the nomenclature and scientific terminology necessary to accurately describe and classify plant species. Basic taxonomy and phylogeny will be emphasized in order to give the student a clear perspective on speciation and genetic pathways to plant diversity. Terminology concerning exterior as well as interior characteristics of vegetative and reproductive systems allows students to accurately identify those native and exotic species used in California landscapes. CSU

HORT-125 Indoor and Container Plants

3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122

The identification, propagation, and production of selected foliage plants common to indoor landscapes. CSU

HORT-132 Pest Management

1-3 units SC
Variable hours
Recommended: HORT 141, 143, 145, and 161; eligibility for ENGL 122

This course offers students methods and tools for managing pests in the urban environment with special emphasis on prepa-ration for the California Pest Control Operator’s License. CSU
HORT-140 Basic Plant Taxonomy
3 units SC
54 hours lecture per term
Recommended: HORT 109 or 110 or equivalent; eligibility for ENGL 122
An overview course designed to acquaint students with the artifical and phonetic systems of classification as applied to vascular plant species in cultivation. Topics to be presented include: the nature and use of keys, the naming of plants, vegetative and reproductive terminology, modern phylogenetic systems, and a basic introduction to major plant groupings, ecologically and economically. CSU

HORT-141 Tree Identification
3 units SC
54 hours lecture per term
Recommended: HORT 110 or equivalent; eligibility for ENGL 122 or equivalent
Note: this course meets the plant certification for California Association for Nurserymen; California Landscape Contractor's Licensing and satisfies International Society of Arboriculture Continuing Education units.
Taxonomic and nomenclatural identity, habits of growth, liabilities, and geographical origin of landscape trees, native and exotic. Focus on tree valuation, landscape use, and structural analysis of species from nursery stock to mature specimens. CSU

HORT-141L Tree Identification laboratory
1 unit SC
May be repeated once
54 hours laboratory per term
Recommended: HORT 110 or equivalent
Note: this course meets continuing education unit requirements for the International Society of Arboriculture Professional upgrades.
Field identification of trees, native and exotic. Cultural requirements, landscape design criteria and functional values. Field outings to local gardens and arboreta. Planting site analysis compared to tree candidate requirements are linked to standard arboricultural rating systems. CSU

HORT-143 Shrub Identification
3 units SC
54 hours lecture per term
Recommended: HORT 110 or equivalent; HORT 140 and eligibility for ENGL 122 or equivalent
Note: this course meets the plant certification for California Association of Nurserymen; California Landscape Contractor's Licensing and satisfies International Society of Arboriculture Continuing Education units.
Taxonomy, identity, growth habits, landscape values and natiivities of shrubs, naive and exotic, used in the urban landscape. Emphasis on contemporary and historical landscape design with shrubs, from maritime to continental environments. CSU

HORT-143L Shrub Identification Laboratory
1 unit SC
May be repeated once
54 hours laboratory per term
Recommended: HORT 110 or equivalent
Note: this course satisfies California Association of Nurserymen's continuing education requirements for members.
Field identification of shrubs, native and exotic. Cultural care requirements, landscape design criteria, and functional values. Field outings to local gardens and arboreta and parks. Introduction and identification of shrubs species less commonly seen in Mediterranean climate setting. CSU

HORT-145 Ground Covers and Vines Identification
3 units SC
54 hours lecture per term
Recommended: HORT 110 or equivalent; eligibility for ENGL 122 or equivalent
Note: this course meets the plant certification requirements for California Association of Nurserymen and current guidelines for State of California Landscape Contractors Association.
Taxonomic identity, habits of growth, cultural requirements and geographical origin of ground covers and vines, native and exotic, used in the urban landscape. Analysis and evaluation of local landscape settings that appropriately support ground cover species. Aerial and edaphic requirements of 180 species introduced and discussed. CSU

HORT-147 Annuals and Perennials Identification
3 units SC
54 hours lecture per term
Recommended: HORT 110 or equivalent; eligibility for ENGL 122 or equivalent
Note: this course meets the plant certification requirements for California Association of Nurserymen and current guidelines for the State of California licensing for landscape contractors.
Taxonomic identity, habits of growth, liabilities, cultural preferences and geographical origin of annual and perennials, native and exotic, used in the urban landscape. CSU

HORT-147L Annuals and Perennials Identification Laboratory
1 unit SC
54 hours laboratory per term
Recommended: HORT 110 or equivalent
Field identification of annuals and perennials, native and exotic. Cultural requirements, landscape design criteria, and the functional values. Field outings to local gardens and arboreta. CSU

HORT-148 California Native Plants
1 unit SC
May be repeated three times
54 hours laboratory per term
Note: trip location varies for each course offering
This is a field identification course of California native plants intended for landscape professionals involving the study of
California plant communities and the environments that shape them. This course is designed to acquaint the landscape design student with the dominant and typical plant constituents of each vegetation unit in California, focusing primarily on those native species currently used in the nursery industry. Habitat, soil, and climatic factors are discussed in relationship with the plant species established in their natural and horticultural environment. Multiple day field trips to select California vegetation environments are taken to record relevant plant and habitat data. CSU

HORT-149  Natural Landscape Interpretation  
1 unit  SC  
May be repeated three times  
54 hours laboratory per term  
Recommended: HORT 110 or equivalent, ENGL 122 or equivalent  
A complementary course of contemporary/future landscape professionals involving the study of California plant communities and the environments that shape them. This course is designed to acquaint the landscape design student with the dominant and typical plant constituents of each vegetation unit in California, focusing primarily on those native species currently used in the nursery industry. Habitat, soil, and climatic factors are merged with the plant species to establish appropriate natural and horticultural context. CSU

HORT-150  Selected Topics in Horticulture  
Variable hours  
May be repeated three times  
A supplemental course in horticulture to provide a study of current concepts and problems in horticulture and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

HORT-154  Regional Herbology  
3 units  SC  
54 hours lecture per term  
Recommended: eligibility for ENGL 122  
This course examines wild plants and cultivated herbs of California, western and eastern regions worldwide. Study will include specific plant characteristics, environmental relationships, contemporary and traditional employment of plants for food, tools, magic and medicine from the context of historic plant usage to theory and practice of contemporary herbalism. Observations will emphasize plant associations, ecological alliances, and the development of skills for correct identification. CSU, UC

HORT-156  Natural Gardening Systems  
3 units  SC  
54 hours lecture per term  
Recommended: eligibility for ENGL 122  
This course explores methods and techniques employed in understanding, developing and maintaining vegetable, fruit and landscape plants. Special emphasis will be on biointensive, low-impact practices based on sound biological principles, and appropriate resource management. Topics may include: soil building compost, vermiculture, cover crops, companion planting, biodynamic, French intensive and Permaculture techniques. CSU, UC

HORT-158  Revegetation and Restoration Practices  
3 units  SC  
54 hours lecture per term  
Recommended: eligibility for ENGL 122  
This course explores methods and techniques employed in understanding, developing and maintaining small-scale and large-scale restoration projects. Topics will include: design considerations, analysis of data, plant materials, technical resources, history of revegetation, literature/website research, field techniques and methods, government regulations and agencies involved. On-site evaluation of projects and resource planning strategies and management will be done. CSU

HORT-160  Plant Propagation  
3 units  SC  
54 hours lecture per term  
Recommended: HORT 110 or equivalent; eligibility for ENGL 122 or equivalent  
This course will teach the principles and practices of plant propagation by growing plants from seed and cuttings into marketable nursery stock. It will teach the student to understand the physiological process that a plant part goes through in becoming a living plant. CSU

HORT-161  Plant Pests and Diseases  
3 units  SC  
54 hours lecture per term  
Recommended: HORT -110 or equivalent; eligibility for ENGL 122 or equivalent  
Survey of major plant pests and diseases in Northern California, including bacteria, fungi, insects and mites. This course includes an introduction to the identification and recognition of pests, beneficials and diseases associated with plants. Emphasis will be on the biology of pest and beneficial species, and the ecologies within which they occur. Pest Management will be presented using Integrated Pest Management (IPM) and Plant Health Care (PHX) models. Lectures will focus on key concepts in applied ecology, along with pest, beneficial and disease identification. CSU

HORT-163  Nursery and Greenhouse Practices  
3 units  SC  
54 hours lecture per term  
Recommended: eligibility for ENGL 122 or equivalent  
This course is designed to introduce the student to the nursery industry and explore the science of greenhouse management. Topics cover all aspects: from greenhouse design and structure, manufacture and operation, to the business structure and management of a nursery. CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Lecture/Laboratory Hours</th>
<th>Recommended Prerequisites</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT-164</td>
<td>Soil Science and Management</td>
<td>3</td>
<td>54 hours</td>
<td>HORT 110; eligibility for ENGL 122 or equivalent</td>
<td>An introductory course of soil science and management of soils in landscapes. Soil biology, physics and chemistry are integrated with geological concepts in the applied scientific course. Landscape scale projects and solutions are evaluated in terms of their soils related elements. CSU, UC</td>
</tr>
<tr>
<td>HORT-164L</td>
<td>Soil Science Laboratory</td>
<td>1</td>
<td>54 hours</td>
<td>HORT 110; (should be taken concurrently with HORT 164); eligibility for ENGL 122</td>
<td>Field trips, demonstrations, and experiments designed to strengthen understanding of topics presented in HORT 164. CSU</td>
</tr>
<tr>
<td>HORT-165</td>
<td>New Plant Introductions</td>
<td>3</td>
<td>54 hours</td>
<td>HORT 109 or 110; eligibility for ENGL 122</td>
<td>This course will help students learn the multitude of new plants becoming available in the nursery industry. It will help instruct the student in the selecting, testing and marketing processes. It will cover the taxonomic identity of new plant introductions, habits of growth, liabilities, and geographical origin of plant materials used in the urban landscape. CSU</td>
</tr>
<tr>
<td>HORT-166</td>
<td>Fall Plant Production</td>
<td>1</td>
<td>May be repeated once</td>
<td>eligibility for ENGL 122 or equivalent, HORT 160 or equivalent</td>
<td>A continuing course on the principles and practices of container production. This course is designed to help students learn greenhouse management, the scheduling of fall and winter plant production and the marketing of fall and winter grown containerized nursery stock. CSU</td>
</tr>
<tr>
<td>HORT-167</td>
<td>Spring Plant Production</td>
<td>1</td>
<td>May be repeated once</td>
<td>eligibility for ENGL 122 or equivalent, HORT 160 or equivalent</td>
<td>A course on the principles and practices of container production. This course is designed to help student learn greenhouse management, the scheduling of spring and summer plant production and the marketing of spring and summer grown containerized nursery stock. CSU</td>
</tr>
<tr>
<td>HORT-170</td>
<td>Landscape Drafting</td>
<td>3</td>
<td>54 hours</td>
<td>HORT 110; eligibility for ENGL 122</td>
<td>A fundamental drafting and design course to acquaint the horticulture student with the tools and techniques used for professional presentation of landscape designs. CSU</td>
</tr>
<tr>
<td>HORT-171</td>
<td>Landscape Construction</td>
<td>3</td>
<td>36 hours / 54 hours</td>
<td>HORT 110; eligibility for ENGL 122</td>
<td>An introduction to landscape contracting, its tools and techniques. Field experience on campus and in the community. CSU</td>
</tr>
<tr>
<td>HORT-174</td>
<td>Landscape Design</td>
<td>3</td>
<td>54 hours</td>
<td>HORT 170; eligibility for ENGL 122</td>
<td>This course will apply the skills developed in HORT 170. The predominant area of application will be toward residential landscape designs. Students will be given an in-depth view of the elements of design pertaining to landscapes. Through this process the student will be exposed to site analysis, topography, drainage, plant analysis, and construction planning as they apply to the residential landscape. CSU, UC</td>
</tr>
<tr>
<td>HORT-177</td>
<td>Landscape Irrigation Installation</td>
<td>3</td>
<td>36 hours / 54 hours</td>
<td>HORT 173 and 176 or equivalent; eligibility for ENGL 122</td>
<td>Course designed to successfully plan, assemble components, and install a landscape irrigation system to provide adequate coverage of a landscape site. CSU</td>
</tr>
<tr>
<td>HORT-179</td>
<td>Arboriculture</td>
<td>3</td>
<td>54 hours</td>
<td>HORT 110 and HORT 141 or equivalent; eligibility for ENGL 122 or equivalent</td>
<td>Introduction to Arboriculture, applied tree biology and forest ecology. How to care for and maintain trees in urban, rural and wildland settings. This course is a survey of current knowledge of trees as applied to tree care, landscape maintenance and landscape design fields. CSU</td>
</tr>
<tr>
<td>HORT-179L</td>
<td>Arboriculture Laboratory</td>
<td>1</td>
<td>54 hours</td>
<td>HORT 141 and 179 (may be taken concurrently with HORT 179L); eligibility for ENGL 122</td>
<td>Course follows study guide prepared by National Arborist Association and the International Society of Arboriculture.</td>
</tr>
</tbody>
</table>
Exposure to climbing techniques, knots, safety, chainsaw operation, and maintenance for certification as arborist or tree worker. CSU

**HORT-298 Independent Study**

- .5-3 units SC
- **May be repeated three times**
- Variable hours
- An opportunity for advanced students to study special interests under the direction of the faculty. CSU

**Hotel restaurant management**

See Culinary Arts – CULN and HRMCU

**Humanities – HUMAN**

Applied and Fine Arts
Dean of Applied and Fine Arts
Humanities Building 112 and 113
925-685-1230 x 2312

**Possible career opportunities**

The study of humanities can open up career opportunities in such diverse fields as advertising, banking, foreign service, journalism, law, public administration, publishing, and teaching.

**HUMAN-105 Introduction to Humanities: Arts and Ideas**

- 3 units SC
- 54 hours lecture per term
- **Recommended:** eligibility for ENGL 122 or equivalent
- This is a non-chronological course that introduces students to the integration of creative arts and the world of ideas. Students will learn to analyze, interpret, and relate masterworks selected from literature, music, drama, painting, sculpture, photography, architecture, dance, and film, to trends in philosophy, religion and scientific thought. Works from diverse global cultures may be selected from throughout the various ages of history. Emphasis is placed on the student’s personal interaction with human creative expression. CSU, UC

**HUMAN-108 The Roots of Hell**

- 3 units SC
- 54 hours lecture per term
- **Recommended:** eligibility for ENGL 122 or equivalent
- This is an introductory course which is organized historically around the theme of hell; and historical and cross-cultural analysis of how poets, philosophers and artists have dealt with the dark side of human nature and represented life after death, guilt and responsibility, trial and redemption, and personal growth and enlightenment, offering literature, philosophy, art, architecture, sculpture, music and film from international sources. CSU, UC

**HUMAN-110 Introduction to Humanities: Ancient Civilizations (to 500 A.D.)**

- 3 units SC
- 54 hours lecture per term
- **Recommended:** eligibility for ENGL 122 or equivalent
- This is an introductory course that integrates the visual arts, music, literature, drama, architecture, philosophy and history. Students will study selections from original texts of literature and philosophy from ancient Egypt and Mesopotamia through the late Roman period (A.D. 500). CSU, UC

**HUMAN-111 Introduction to Humanities: Middle Ages and Renaissance (500 A.D. - 1700 A.D.)**

- 3 units SC
- 54 hours lecture per term
- **Recommended:** eligibility for ENGL 122 or equivalent
- This is an introductory course that integrates the visual arts, music, literature, drama, architecture, philosophy, religion, science and technology, and history. Students will study selections from original texts of literature and philosophy from the end of the Roman period to the end of the Renaissance. CSU, UC

**HUMAN-112 Introduction to Humanities: The Modern World (1700 - present)**

- 3 units SC
- 54 hours lecture per term
- **Recommended:** eligibility for ENGL 122 or equivalent
- This is an introductory course that integrates the visual arts, music, literature, drama, architecture, philosophy, and history. Students will study selections from original texts of literature and philosophy from the end of the Renaissance to the present. CSU, UC

**HUMAN-115 Introduction to Humanities: The American Multicultural Experience**

- 3 units SC
- 54 hours lecture per term
- **Recommended:** eligibility for ENGL 122 or equivalent
- This class will explore the multicultural diversity of contemporary American creative expression through an integrative survey of the visual arts, literature, music, thought and religion, dance, theater, and film. Study will focus on at least three of the following cultural groups: African American, Native American, Asian American, and Latino American. This class will examine contemporary creative works in relation to their historic cultural roots, as well as the contemporary cultural context in which they have been created. CSU, UC
HUMAN-116 The Arts and Culture of Asia
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This is an introductory course that studies selected visual arts, architecture, literature, philosophy, religion, music, theater, and cinema of Asian cultures, in a framework that includes both history and the modern world. The cultures studied will be selected from the following: East Asia, Southeast Asia, South Central Asia, Central Asia, the Middle East, and North Asia/Transcucasia. CSU, UC

HUMAN-118 Film, Fiction and Criticism
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
Students will explore the aesthetic make-up of masterworks of literature chosen from the novel, the short story and the play, and will learn to draw intelligent conclusions about the structure and meaning of these literary works. Students will be introduced to the hands-on integration of three areas of the humanities-literature, cinema/video, and the branch of philosophy called aesthetic criticism. CSU, UC

HUMAN-120 Introduction to Humanities: The African American Experience
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This is an introductory course that integrates the visual arts, music, literature, drama, architecture, philosophy and history. Students will study African American culture and its influence upon American life. The course will emphasize aesthetics, history, the fine and applied arts, and literature, and how they reflect the social, political, and economic realities of the unique culture of African Americans. CSU, UC

HUMAN-123 American Popular Culture
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This is an introductory humanities course studying American popular culture: arts, entertainment, myths, the heroic tradition, and symbols. CSU, UC (credit limits may apply to UC – see counselor)

HUMAN-298 Independent Study
5-3 units SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend beyond courses offered.
An opportunity for students to pursue special interests under direction of the humanities faculty. CSU, UC (credit limits may apply to UC – see counselor)

Italian – ITAL

Students with prior foreign language instruction should check with a language teacher regarding proper placement in foreign language courses. The following system is generally used to determine the appropriate term of college work based on high school language: two years equal one college term; three years equal two college terms; four years equal three college terms.

Applied and Fine Arts
Dean of Applied and Fine Arts
Humanities Building 112 and 113
925-685-1230 x 2312

Possible career opportunities
The study of Italian can open up opportunities in communications, foreign trade and banking, transportation, government, the Foreign Service, tourism, library services, teaching, professional translating, journalism, and all levels of education, including university teaching. Most foreign language careers require more than two years of study.

Certificate of completion - Italian
This certificate prepares students with an intermediate to advanced knowledge of Italian and familiarizes them with the culture of Italy.

To earn a certificate of completion, students must complete each course used to meet a certificate requirement with a "C" grade or better.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL 120</td>
<td>5</td>
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<tr>
<td>ITAL 121</td>
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<tr>
<td>ITAL 220</td>
<td>5</td>
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<tr>
<td>ITAL 221</td>
<td>5</td>
</tr>
<tr>
<td>ITAL 230</td>
<td>3</td>
</tr>
<tr>
<td>ITAL 231</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units required 13-16

ITAL-120 First Term Italian
5 units SC
90 hours lecture / 18 hours laboratory by arrangement per term
This is a basic course in understanding, speaking, reading, and writing Italian. There is an extensive utilization of cultural material and information. CAN ITAL 2, ITAL 120+121 = CAN ITAL SEQ A, CSU, UC (credit limits may apply to UC – see counselor)

ITAL-121 Second Term Italian
5 units SC
90 hours lecture / 18 hours laboratory by arrangement per term
Recommended: ITAL 120 or equivalent
This is a sequential course in Italian, including the understanding, speaking, reading, and writing of the language. A continu-
ation of basic communicative structures and functions are introduced, as well as a continued examination of the culture of Italy. CAN ITAL 4, ITAL 120+121 = CAN ITAL SEQ A, CSU, UC (credit limits may apply to UC – see counselor)

ITAL-145  First Trimester Italian
3 units  SC
54 hours lecture / 18 hours laboratory by arrangement per term
Note: ITAL 120 and 121 combined are equivalent in content to ITAL 145, 146 and 147 combined.
This is a basic course in understanding, speaking, reading, and writing Italian. There is utilization of cultural material and information. CSU, UC (credit limits may apply to UC – see counselor)

ITAL-146  Second Trimester Italian
3 units  SC
54 hours lecture / 18 hours laboratory by arrangement per term
Recommended: ITAL 145 or equivalent
Note: ITAL 120 and 121 combined are equivalent in content to ITAL 145, 146 and 147 combined.
This course continues learning the basic aspects of the Italian language by expanding the scope of the material covered. Cultural and historical elements are introduced. CSU, UC (credit limits may apply to UC – see counselor)

ITAL-147  Third Trimester Italian
3 units  SC
54 hours lecture / 18 hours laboratory by arrangement per term
Recommended: ITAL 145 or equivalent
Note: ITAL 120 and 121 combined are equivalent in content to ITAL 145, 146 and 147 combined.
This course finalizes the study of grammar and syntax that began with ITAL 145. Conversational skills are refined. Cultural and historical elements are studied in greater depth. CSU, UC (credit limits may apply to UC – see counselor)

ITAL-150  Topics in Italian
3-4 units  SC
May be repeated three times
Variable hours
A supplemental course in Italian to provide a study of current concepts and problems in Italian and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

ITAL-155  First Term Conversational Italian
3 units  SC
May be repeated once
54 hours lecture / 18 hours laboratory by arrangement per term
Note: course does not satisfy the academic requirements of the ITAL 120-121 series.
This course provides instruction in basic Italian conversation utilizing practical material with oral-aural practice based on this material. CSU

ITAL-156  Second Term Conversational Italian
3 units  SC
54 hours lecture / 18 hours laboratory by arrangement per term
Recommended: ITAL 155 or equivalent
Note: course does not satisfy the academic requirements of the ITAL 120-121 series.
This course improves conversational skills through a study and utilization of idiomatic and slang expressions current in contemporary Italian. Some study in dialect expressions is undertaken. CSU

ITAL-157  Third Term Conversational Italian
3 units  SC
54 hours lecture per term
Recommended: ITAL 155 or equivalent
Note: course does not satisfy the academic requirements of the ITAL 120-121 series.
This course improves the expansion of conversational skills through a study and utilization of idiomatic and slang expressions current in contemporary Italian. Further study of dialect expressions is undertaken. CSU

ITAL-220  Third Term Italian
5 units  SC
90 hours lecture / 18 hours laboratory by arrangement per term
Recommended: ITAL 220 or equivalent
This is an intermediate level course that develops functional fluency in understanding, speaking, reading, and writing Italian. Students are introduced to the study of Italian culture. There is further study and interpretation of Italian cultural. CAN ITAL 8, ITAL 220+221 = CAN ITAL SEQ B, CSU, UC (credit limits may apply to UC – see counselor)

ITAL-221  Fourth Term Italian
3 units  SC
54 hours lecture per term
Recommended: ITAL 221 or equivalent
This is an intermediate course that continues to develop fluency in all aspects of the Italian language with particular attention to literary forms as reflected in contemporary Italian. The present, past and imperfect subjunctive are covered. CAN ITAL 10, ITAL 220+221 = CAN ITAL SEQ B, CSU, UC (credit limits may apply to UC – see counselor)

ITAL-230  Fifth Term Italian
3 units  SC
54 hours lecture per term
Recommended: ITAL 221 or equivalent
This course is a study of representative, Italian literary works. Students participate actively through discussion, oral reports, and written analysis in Italian. CSU, UC
ITAL-231 Sixth Term Italian
3 units SC
54 hours lecture per term
Recommended: ITAL 230 or equivalent
This is a continuation of ITAL 230 with intensive additional study of representative literary works. Students read some literature in various dialects to study similarities and differences of expression. Students participate actively through discussion, oral reports and written analysis in Italian. CSU, UC

Japanese – JAPAN

Students with prior foreign language instruction should check with a language teacher regarding proper placement in foreign language courses. The following system is generally used to determine the appropriate term of college work based on high school language: two years equal one college term; three years equal two college terms; four years equal three college terms.

Possible career opportunities
The study of Japanese can open up opportunities in communications, foreign trade and banking, transportation, government, the Foreign Service, tourism, library services, teaching, professional translating, journalism, and all levels of education, including university teaching. Most foreign language careers require more than two years of study.

Certificate of completion - Japanese
This certificate prepares students with an intermediate to advanced knowledge of Japanese and familiarizes them with the culture of Japan.

To earn a certificate of completion, students must complete each course used to meet a certificate requirement with a “C” grade or better.

complete 15 units from the following list of courses: units
JAPAN-120 First Term Japanese................................................... 5
JAPAN-121 Second Term Japanese............................................. 5
JAPAN-220 Third Term Japanese............................................... 5
JAPAN-221 Fourth Term Japanese............................................. 5
Total units required 15

Certificate of completion - Japanese

complete 13-16 units from the following list of courses: units
JAPAN-145 First Trimester Japanese........................................ 3
JAPAN-146 Second Trimester Japanese................................. 3
JAPAN-147 Third Trimester Japanese................................. 3
JAPAN-220 Third Term Japanese........................................ 5
JAPAN-221 Fourth Term Japanese....................................... 5
JAPAN-245 Intermediate Japanese..................................... 3
Total units required 13-16

JAPAN-120 First Term Japanese
5 units SC
90 hours lecture / 18 hours laboratory by arrangement per term
Recommended: JAPAN 120 or equivalent
Note: JAPAN 120 and 121 combined are equivalent in content to JAPAN 145, 146 and 147 combined.
An introduction to the Japanese language focusing on communicative fluency. Although writing and reading and culture are taught, speaking and listening will be emphasized. For communicative fluency at this level, more vocabulary development and less grammar points will be focused. Hiragana and Katakana are taught, and Kanji are mainly for passive reading. Cultural topics may include greetings, the Japanese education system, college life, and popular pastimes. Taught as a two-term series. CAN JAPN2 JAPAN 120 + 121 = CAN JAPN SEQ A, CSU, UC (credit limits may apply to UC – see counselor)

JAPAN-121 Second Term Japanese
5 units SC
90 hours lecture / 18 hours laboratory by arrangement per term
Recommended: JAPAN 120 or equivalent
Note: JAPAN 120 and 121 combined are equivalent in content to JAPAN 145, 146 and 147 combined.
A continuation of JAPAN 120 for realistic and communicative purposes. Kanji is introduced increasingly at the sentence and paragraph level. Students will be familiarized with all three writing systems: Hiragana, Katakana, and Kanji. Cultural topics may include food, shopping, and what to do in case of sickness. The proficiency level should develop to a basic survival level. Taught as a two-term series. CAN JAPN 4, JAPAN 120 + 121 = CAN JAPN SEQ A, CSU, UC (credit limits may apply to UC – see counselor)

JAPAN-130 First Term Kanji
3 units SC
54 hours lecture per term
Recommended: JAPAN 120 or equivalent
This course will enable students to enhance competence in reading and writing Japanese in daily-life situations. Examples include reading and comprehending simple essays and articles, and understanding the advertisements for supermarkets and sporting events. The course will cover up to 169 characters. CSU

JAPAN-131 Second Term Kanji
3 units SC
54 hours lecture per term
Recommended: JAPAN 130 or equivalent
This course will enable students to enhance competence in reading and writing Japanese in daily-life situations. Examples include reading more complicated essays and letters, and understanding maps, road signs, and TV programs. The course will cover up to 345 characters. CSU
JAPAN-132 Third Term Kanji
3 units SC
54 hours lecture per term
Recommended: JAPAN 131 or equivalent
This course will enable students to enhance advanced competence in reading and writing Japanese in daily life situations. Examples include reading and comprehending intermediate-level essays and understanding the pamphlets for travel, train timetables, and newspaper headlines. The course will cover up to 500 characters. CSU

JAPAN-145 First Trimester Japanese
3 units SC
54 hours lecture / 18 hours laboratory by arrangement per term
Note: JAPAN 120 and 121 combined are equivalent in content to JAPAN 145, 146 and 147 combined.
An introduction to the Japanese language focusing on communicative fluency. Although writing and reading and culture are taught, speaking and listening will be emphasized. For communicative fluency at this level, more vocabulary development and less grammar points will be focused. Hiragana and Katakana are taught for writing, and Kanji for passive reading. Cultural topics may include greetings and the Japanese education system. Taught as a trimester series. CSU, UC (credit limits may apply to UC – see counselor)

JAPAN-146 Second Trimester Japanese
3 units SC
54 hours lecture / 18 hours laboratory by arrangement per term
Recommended: JAPAN 145 or equivalent
Note: JAPAN 120 and 121 combined are equivalent in content to JAPAN 145, 146 and 147 combined.
This course continues to develop essential vocabulary words for communicative fluency, emphasizing speaking and listening, although writing and reading and culture are taught as well. Kanji begins to be taught for active writing. Cultural topics may include popular pastimes and shopping. Taught as a trimester series. CSU, UC (credit limits may apply to UC – see counselor)

JAPAN-147 Third Trimester Japanese
3 units SC
54 hours lecture / 18 hours laboratory by arrangement per term
Recommended: JAPAN 146 or equivalent
Note: JAPAN 120 and 121 combined are equivalent in content to JAPAN 145, 146 and 147 combined.
This course is the third trimester of basic Japanese language study. It further develops realistic and communicative fluency. Kanji is introduced increasingly at the sentence and paragraph level. Students are familiarized with all three writing systems: Hiragana, Katakana, and Kanji. Cultural topics may include food, shopping, and what to do in case of illness. The proficiency level should develop to a basic survival level. Taught as a trimester series. CSU, UC (credit limits may apply to UC – see counselor)

JAPAN-150 Topics in Japanese
.3-.4 units SC
May be repeated three times
Variable hours
A supplemental course in Japanese to provide a study of current concepts and problems in Japanese and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

JAPAN-220 Third Term Japanese
5 units SC
90 hours lecture / 36 hours laboratory per term
Recommended: JAPAN 121 or equivalent
Students will develop a functional fluency in understanding, speaking, reading, and writing Japanese. Students will be introduced to the study of Japanese literature and history, and will continue their further study and interpretation of Japanese culture. CSU, UC

JAPAN-221 Fourth Term Japanese
5 units SC
90 hours lecture / 36 hours laboratory per term
Recommended: JAPAN 220 or equivalent
The course furthers the development of functional fluency in understanding, speaking, reading, and writing Japanese in a manner appropriate to the context. Also covered is the continued study of Japanese literature and history to provide greater insight into Japanese culture and society. The course will provide students with an active learning process including interaction with Japanese native speakers. CSU, UC

JAPAN-245 Fourth Trimester Japanese
3 units SC
54 hours lecture per term
Recommended: JAPAN 147 or equivalent
This intermediate course focuses on how to use the language appropriately in various conversational contexts, and oral communication skills are expanded. However, reading and writing are emphasized more at this level. Increasing number of Kanji are introduced with information about character components and word formation. Cultural topics will include climate, proverbs and social interactions in contemporary society. CSU, UC

Journalism – JRNAL

English Division
Krista Johns, Dean
Faculty Office 136
925-685-1230 x 2519

Possible career opportunities
The journalism program prepares students in the writing, reporting, and critical thinking skills required for jobs in the news media or for transfer to a journalism program at a four-year institution. Career options include copy editor, script writer,
broadcast journalist, newspaper reporter, magazine writer, columnist, public information officer, online writer, speech writer, freelance writer, advertising copy writer, editor, and photojournalist. Some career options may require more than two years of college study.

JRNAL-110 Mass Media of Communication
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122

This course is an introduction to mass communications. Students will study the major media: newspapers, broadcasting, books, advertising, magazines, recordings, and films and their impact on the social environment. Students will pay particular attention to how the media are used, how they are structured, who controls them, and how they influence individual and social values. Other topics include the technology of mass communications, past, present, and future; First Amendment rights and responsibilities; censorship and propaganda. CAN JOUR 4, CSU, UC

JRNAL-120 Basic Newspaper Techniques
3 units SC
54 hours lecture per term
Recommended: ENGL 118

This course is an introduction to news writing and reporting. Students will learn how to develop sources, conduct interviews, observe detail, take accurate notes, and do online research. They will then shape these findings into stories that are lively, informative, and significant. Students will write a variety of stories, including news, features, profiles, critical reviews, and opinion pieces or editorials. They will learn editing techniques that improve their writing and sharpen their organizational skills. On occasion, their work will be published in the college newspaper, The Inquirer. CAN JOUR 2, CSU

JRNAL-126 Newspaper Production Laboratory
1-3 units SC
May be repeated three times
Variable hours
Recommended: ENGL 118

Note: this is an open entry/open exit course.

This is a laboratory course which produces the college newspaper. Student editors and staff members assign, write, research, edit and computer typeset stories, take photographs, solicit advertisements, design pages using desktop publishing software on networked terminals, work with a local printer, and distribute a weekly newspaper. Students are trained to exercise news judgment and to consider the ethical implications of their work. They are expected to take responsibility for the accuracy and truth of their stories and photographs, as well as to develop professional work habits, meet deadlines and adhere to high standards. CSU

JRNAL-150 Writing the Feature Story
3 units SC
54 hours lecture per term
Recommended: ENGL 118

This course focuses on the research, writing, and marketing of articles for consumer magazines, specialized publications and newspaper feature sections. Emphasis on analysis of current magazine and newspaper feature material, group discussion of thoroughly researched, carefully written student projects, and individual assistance with manuscripts. CSU

JRNAL-298 Independent Study
5-3 units SC
May be repeated three times
Variable hours

Note: students must submit an acceptable educational contract to department and Instruction office; topics must extend beyond courses offered.

Selected students may pursue special studies in journalism under the guidance of faculty. CSU

Latin – LATIN

Students with prior foreign language instruction should check with a language teacher regarding proper placement in foreign language courses. The following system is generally used to determine the appropriate term of college work based on high school language: two years equal one college term; three years equal two college terms; four years equal three college terms.

Latin – LATIN

LATIN-120 First Term Latin
5 units SC
90 hours lecture per term
Prerequisite: LATN 120 or equivalent
This is an introductory course based on ancient authors, designed to introduce students to the rudiments of elementary Latin grammar, vocabulary, syntax and culture, with special emphasis placed on the study of English derivatives in order to enhance the grasp of English words. CSU, UC

LATIN-121 Second Term Latin
5 units SC
90 hours lecture per term
Prerequisite: LATN 120 or equivalent
This is a second semester course based on ancient authors, designed to further acquaint students with the rudiments of Latin grammar, vocabulary, syntax and culture, with special emphasis placed on the study of English derivatives in order to enhance the grasp of English words. Students will write short essays. CSU, UC
Learning skills – LRNSK

Counseling Division
Terry Armstrong, Dean
Counseling Center 111
925-685-1230 x 2288

Possible career opportunities
Diablo Valley College’s learning skills course offerings provide support to students with disabilities who are pursuing their academic and career objectives. Courses are designed to determine students’ eligibility for services, and to enhance student success in academic and career coursework.

LRNSK-049 Assessment
.5 unit CR/NC
Not degree applicable
6 hours lecture / 9 hours laboratory by arrangement per term
Note: For more information, see Disability Support Services.
A course designed to determine student’s eligibility for learning disability services. Through group and individual testing and in-class exercises, eligibility is determined and a profile of learning goals and strategies for coping with learning disabilities are developed.

LRNSK-053 Computer-Assisted Writing Strategies
3 units SC
May be repeated three times
Not degree applicable
54 hours lecture per term
Recommended: LRNSK 056 (may be taken concurrently) or typing speed of at least 15 words per minute and LRNSK 057 (may be taken concurrently) or computer proficiency in basic word processing
Course prepares beginning writers with or without learning difficulties to succeed in mainstream developmental English classes. Focuses on computer technology, tape recording and other strategies for overcoming problems in writing fluency, paragraph composition, spelling and usage. Diagnostic tests are used to determine self-paced, individualized assignments.

LRNSK-054 Prescriptive Reading
3 units SC
May be repeated twice
Not degree applicable
54 hours lecture per term
A basic reading class which provides strategies to improve reading accuracy, speed, vocabulary and comprehension. After diagnostic testing, students are assigned to small groups to develop the specific skills they need.

LRNSK-056 Adaptive Computer Technology
.5-3 units CR/NC
May be repeated
Not degree applicable
Variable hours
Course provides individualized and small group instruction in computer access strategies for learning disabled, physically disabled, visually impaired and other disabled students. Students may learn word processing aided by speech synthesizers, screen enlargers, speech recognition programs and adaptive keyboarding strategies.

LRNSK-057 Augmented Word Processing
3 units SC
May be repeated three times
Not degree applicable
54 hours lecture per term
Note: eligibility determined by DSS guidelines. Students must be able to profit from instruction yet present a disability that would handicap them in mainstream computer application classes. No computer skills or knowledge is required.
Course provides individualized and small group instruction in word processing skills for students with disabilities. This entry-level course will cover basic skills required to produce college level papers. Individualized instruction is provided to insure success with basic skills to suit his / her special school and work needs.

LRNSK-058 Math Strategies
3 units SC
May be repeated three times
Not degree applicable
54 hours lecture per term
A basic math class which provides small group and individual instruction in the basic concepts of arithmetic and mathematical reasoning. Following diagnostic testing, students may focus on place value, fractions, decimals and word problems in self-paced lessons followed by mastery tests. Appropriate for students with math anxiety.

LRNSK-060 Learning Strategies
3-.5 units CR/NC
May be repeated
18-36 hours laboratory by arrangement per term
Course provides individualized and small group instruction in learning strategies directly applicable to transfer level courses in mathematics, social sciences, biological sciences, physical sciences, economics, and English. Specific research-driven strategies will be taught to students with disabilities that allow them to compensate for the impact of particular disabilities (learning and physical disabilities).

LRNSK-151 Classroom Skills
3 units SC
54 hours lecture per term
A course for students with learning disabilities who need advanced instruction in skills for performing well in the transfer level college classroom. Students develop skills in listening to lectures and discussions, writing lecture and textbook notes and summaries, and preparing sample essay and objective test questions and answers. The course also teaches strategies for reducing test anxiety and introduces specialized software programs and computer technology proven effective for students with learning disabilities. CSU
LRNSK-153 Writing Strategies for College Success
3 units SC
May be repeated once
54 hours lecture / 36 hours laboratory by arrangement per term
Recommended: eligibility for ENGL 118
A course for students with learning disabilities who need improved writing development skills to perform at a college level. Students develop various computer based assistive technology strategies to facilitate college level written composition and to develop college level skills in grammar, punctuation, spelling, vocabulary, and sentence structure. CSU

Liberal Arts (discontinued)

DVC's major in liberal arts is not available to students entering summer 2004 or later. However, students who were admitted to DVC prior to summer 2004 may qualify to complete this degree. This opportunity will expire spring 2009. Certain limitations apply. Please meet with a counselor.

Library studies – L and LS

Library and Learning Resources Division
Ann Patterson, Dean
Library Building 219
925-685-1230 x 2237

Possible career opportunities
Library courses teach the skills necessary to effectively locate, organize and use information in any academic or work setting. There are various titles for the jobs you will be qualified for with a certificate of achievement or associate of science degree in library and information technology: library technician, library assistant, library paraprofessional, instructional media assistant, information specialist, library media specialist, and website editor.

Associate in science degree
Library and information technology

Certificate of achievement
Library and information technology

Associate in science degree - Library and information technology
The associate in science degree in library and information technology prepares students for employment in the dynamic field of library and information services. The skills learned in this program may be used in public, school, academic, and corporate libraries, as well as in other positions requiring information management skills. If you like working with people, books and information, consider a career in library and information technology.

To earn the degree, students must complete each course used to meet a major requirement with a "C" grade or better and maintain an overall GPA of 2.5 or better in the coursework required for the major. Required classes are available online, in the evening, and some are offered in the day. Certain courses may satisfy both a major and a DVC general education requirement; however the units are only counted once. Other electives and course substitutions not listed below are possible with department chairperson approval.

General education requirements ........................................... 3-4

Major requirements

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>27-38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>L 100</td>
<td>Introduction to a Career in Library and Information Technology</td>
</tr>
<tr>
<td>2</td>
<td>L 103</td>
<td>Access to Library Materials</td>
</tr>
<tr>
<td>3</td>
<td>L 104</td>
<td>Cataloging for Paraprofessionals</td>
</tr>
<tr>
<td>3</td>
<td>L 105</td>
<td>Reference and Research Services: Tools and Techniques</td>
</tr>
<tr>
<td>1</td>
<td>L 108</td>
<td>Acquisition of Library Materials</td>
</tr>
<tr>
<td>1</td>
<td>LS 121</td>
<td>Information Competency and Research Skills</td>
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</table>

plus at least 2 units from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>COOP 170</td>
<td>Occupational Work Experience Education</td>
</tr>
<tr>
<td>1-4</td>
<td></td>
</tr>
<tr>
<td>COOP 170A</td>
<td>Internship in Occupational Work Experience Education</td>
</tr>
<tr>
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plus at least 2-6 units from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ENGL 177</td>
<td>Children's Literature</td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>L 109</td>
<td>Delivering Library Services: Issues, Theory and Techniques</td>
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<tr>
<td>2</td>
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<tr>
<td>L 111</td>
<td>Storytelling</td>
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<tr>
<td>L 112</td>
<td>Internet Skills for Library Personnel</td>
</tr>
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<tr>
<td>L 114</td>
<td>Developing and Managing Web Pages</td>
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<td>2</td>
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</tr>
<tr>
<td>L 150</td>
<td>Topics in Library and Information Technology</td>
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<tr>
<td>0.3-4</td>
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</tr>
<tr>
<td>LS 130</td>
<td>Internet and On-line Research</td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>LS 150</td>
<td>Topics in Library Studies</td>
</tr>
<tr>
<td>0.3-4</td>
<td></td>
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</table>

plus at least 0-6 units from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSMG 121</td>
<td>Practices and Concepts of Supervision</td>
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<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COMSC 100</td>
<td>Introduction to Computers and Information Systems</td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COOP 170</td>
<td>Occupational Work Experience Education</td>
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<tr>
<td>1-4</td>
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</tr>
<tr>
<td>COOP 170A</td>
<td>Internship Occupational Work Experience Education</td>
</tr>
<tr>
<td>1-4</td>
<td></td>
</tr>
<tr>
<td>MULTM 100</td>
<td>Introduction to Multimedia Workstations</td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MULTM 110</td>
<td>Digital Imaging Process and Technique I</td>
</tr>
<tr>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>MULTM 171</td>
<td>Web Design</td>
</tr>
<tr>
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</tbody>
</table>

Total units for the major 19

Electives

Units from a selection of degree applicable courses 6-14

Total units for the degree 60
Certificate of achievement - Library and information technology

This certificate program prepares students for employment in the dynamic field of library and information services. The skills learned in this program may be used in public, school, academic, and corporate libraries, as well as in other jobs or businesses requiring information management skills. If you like working with people, books and information, consider a career in library and information technology.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better and maintain an overall GPA of 2.5. Required classes are available online, in the evening and some are offered in the day. Other electives and course substitutions not listed below are possible with department chairperson approval.

**Required courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>L 100</td>
<td>Introduction to a Career in Library and Information Technology</td>
<td>1</td>
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<tr>
<td>L 103</td>
<td>Access to Library Materials</td>
<td>2</td>
</tr>
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<td>Cataloging for Paraprofessionals</td>
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<td>L 108</td>
<td>Acquisition of Library Materials</td>
<td>1</td>
</tr>
<tr>
<td>LS 121</td>
<td>Information Competency and Research Skills</td>
<td>1</td>
</tr>
</tbody>
</table>

**Elective coursework**

- **Plus at least 2 units from:**
  - COOP 170: Occupational Work Experience Education 1-4
  - COOP 170A: Internship in Occupational Work Experience Education 1-4

- **Plus at least 2-6 units from:**
  - ENGL 177: Children's Literature 3
  - L 111: Storytelling                                                        2
  - L 112: Internet Skills for Library Personnel                               1
  - L 114: Developing and Managing Web Pages                                   2
  - L 150: Topics in Library and Information Technology                        0.3-4
  - LS 130: Internet and On-line Research                                       1
  - LS 150: Topics in Library Studies                                          0.3-4

- **Plus at least 0-5 units from:**
  - BUSMG 121: Practices and Concepts of Supervision 3
  - COMSC 095: WWW Publishing with HTML 1
  - COMSC 096: Advanced WWW Publishing 1
  - COMSC 100: Introduction to Computers and Information Systems               3
  - COOP 170: Occupational Work Experience                                     1-4
  - COOP 170A: Internship in Occupational Work                                 1-4
  - MULTM 100: Introduction to Multimedia Workstations 1
  - MULTM 110: Digital Imaging Process and Technique I and II 1-1.5
  - MULTM 171: Web Design                                                      3

**Total units required** 19

To assist students in planning their schedules, Diablo Valley College has prepared a list of required courses to be offered each semester. This list is subject to change due to fiscal constraints and availability of staff and/or facilities, but it should help you in planning your schedule. In addition to these required courses you must complete six units of elective courses. By scheduling your classes according to this course sequencing guide, you will be able to finish the major requirements/certificate of achievement in two years or less depending on the number of units you take each semester. Verify offerings with program faculty, counselors and the on-line schedule of classes.

### Library and information technology course sequence

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
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<tbody>
<tr>
<td>L 100</td>
<td>Introduction to a Career in Library and Information Technology</td>
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<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L 103</td>
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<td>2</td>
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<tr>
<td>L 105</td>
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<td>3</td>
<td>3</td>
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<tr>
<td>L 108</td>
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<td></td>
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<tr>
<td>LS 121</td>
<td></td>
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<td>1</td>
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</tbody>
</table>

**Recommended sequence**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOP 170</td>
<td>Occupational Work Experience Education</td>
<td>1</td>
<td>1</td>
<td></td>
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<tr>
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<td>1</td>
<td>1</td>
<td></td>
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</tr>
</tbody>
</table>

**Elective coursework**

**L-100**

**Introduction to a Career in Library and Information Technology**

- **1 unit SC**
- **18 hours lecture per term**
- **Recommended:** eligibility for ENGL 122 or equivalent

An introduction to the dynamic field of library and information studies for paraprofessionals. This course offers an exploration of the various types of libraries and information centers, the skills necessary for a successful career in the field, and the job opportunities in libraries and information centers. CSU

**L-103**

**Access to Library Materials**

- **2 units LR**
- **36 hours lecture per term**
- **Recommended:** eligibility for ENGL 122 or equivalent

This course introduces students to the full array of access services in a variety of library settings. Special skills and job analysis for paraprofessionals will be discussed as they relate to providing and preserving access to library patrons. The course will also consider the philosophy of access services from a historical perspective to the present. CSU

**L-104**

**Cataloging for Paraprofessionals**

- **3 units SC**
- **54 hours lecture per term**
- **Recommended:** eligibility for ENGL 122

An introductory course on library procedures for description and organization of print and non-print materials, for either manual or automated catalogs. It covers the basic theories, principles and concepts of bibliographic control, including descriptive cataloging, classification, subject analysis, physical processing, and bibliographic maintenance. Emphasis
Library studies

will be placed on print monographs and serials, current Anglo-American Cataloging Rules, MARC format, Library of Congress and Dewey classification and LC Subject Heading. Intended for library assistants and those interested in working in this field. CSU

L-105  Reference and Research Services: Tools and Techniques
3 units LR
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course is an introduction to print and online information resources used in a variety of library and information center settings. Students learn effective techniques for assisting patrons and are provided an opportunity to develop reference service skills by using a wide variety of print and online resources. CSU

L-108  Acquisition of Library Materials
1 unit LR
18 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course teaches library concepts and practices involving the selection, ordering and receiving of materials from the decision to purchase materials to their receipt, processing and distribution. Students will learn to use automated systems and other technology applications. CSU

L-109  Delivering Library Services: Issues, Theory, and Techniques
2 units SC
36 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course teaches oral and written communication skills and strategies essential to successful performance as a library paraprofessional. Communication within the organization, marketing, customer and community relations, and evaluation of services are covered. CSU

L-111  Storytelling
2 units SC
36 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
An introduction to storytelling designed to help people working with children and others to improve their skills as storytellers in the library, classroom, home and other settings. CSU

L-112  Internet Skills for Library Personnel
1 unit SC
18 hours lecture per term
Recommended: LS 130 or equivalent; eligibility for ENGL 122 or equivalent
This course teaches the use of the Internet in providing library and information services. The class is designed for library personnel whose responsibilities include using the Internet and other automated systems for work-related tasks such as reference, cataloging, acquisitions and other information management activities. Exploration of advanced searching techniques, user training and evaluation of online resources are included. CSU

L-114  Developing and Managing Web Pages
2 units CR/NC
36 hours lecture per term
Recommended: LS 130; eligibility for ENGL 122
This course teaches students how to build, manage and maintain web pages that are timely, easy to navigate and well organized. Emphasis is placed on organization, presentation, and maintenance of library web pages. CSU

L-150  Topics in Library and Information Technology
.3-.4 units SC
May be repeated three times
Variable hours
Recommended: eligibility for ENGL 122 or equivalent
A supplemental course to provide for the study of current topics not covered by the regular library and information technology program, but relevant to the current library and information technology field. Special topics will be announced in the schedule of courses. CSU

LS-100  Basic Library and Research Skills
.5 unit CR/NC
9 hours lecture per term
This short-term basic library and research skills course introduces fundamental research skills and the organization, retrieval, and evaluation of electronic and print information. This course is designed to help students develop the college-level skills necessary to effectively utilize information resources. Students will learn fundamental research techniques for their college course work.

LS-120  Introduction to Library Resources
1 unit CR/NC
54 hours laboratory by arrangement per term
Self-paced course introducing students to basic research skills and information resources. The course is designed to introduce students to finding, evaluating and using information in a variety of print and online formats. It will provide college level information skills for the effective use if the Diablo Valley College and other libraries. CSU, UC

LS-121  Information Competency and Research Skills
1 unit CR/NC
9 hours lecture / 27 hours laboratory per term
Recommended: eligibility for ENGL 122 or equivalent
This course teaches the research strategies and skills for successfully finding, retrieving, evaluating and using information in various formats. It combines library skills, research methods, and information technology literacy. Coursework includes the ethical and legal aspects of information use and the critical thinking skills necessary for effective college research. CSU, UC
LS-130  Internet and Online Research
1 unit  CR/NC
18 hours lecture per term
Recommended: eligibility for ENGL 122
An introduction to using the Internet and other electronic resources to search for and retrieve information for research and writing. Through lecture, demonstrations, and hands-on work, a wide range of Internet services and concepts will be introduced including search and navigation tools, research strategies, accessing online databases, downloading, and evaluating information. CSU

LS-150  Topics in Library Studies
.3-4 units  SC
May be repeated three times
Variable hours
A supplemental course in library studies to provide a study of current concepts and problems in research, information organization and retrieval, and related subdivisions. Specific topics will be announced in the schedule of classes. CSU

Machine technology – MATEC

Please check with a counselor for current program status.

Certification of achievement – Machine technology
This program is designed for three categories of students: those wishing to enter the metal machining industry, those wishing to become an apprentice machinist or mechanical technician in research and development, and those wishing to transfer to four-year institutions, and obtain a degree in mechanical engineering, tool design, engineering, manufacturing engineering, metallurgy, or manufacturing processes.
To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better and an overall GPA of 2.5 or better in the coursework required for the certificate. Required courses may be available in the day and some during the evening.

required courses  units
CONST 114  Blueprint Reading............................... 2
ENGIN 111  Mathematics for Technicians................... 4
ENGIN 119  Introduction to Technical Drawing.............. 3
MATEC 120  Introduction to Machine Technology ............ 4
MATEC 121  Machine Processes I .............................. 3
MATEC 220  Production Grinding Practices................. 3
MATEC 222  Introduction to Computer Numerical Control ........................................... 3
MATH 114  Geometry.............................................. 3
PHYS 110-111  Elementary Physics and Laboratory ......... 5

plus at least 3 units from:
MATH 110  Elementary Algebra............................... 4
MATH 121  Plane Trigonometry ............................... 3

Total units required 33-34

MATEC-120  Introduction to Machine Technology
4 units  LR
54 hours lecture per term / 54 hours laboratory per term
This course will cover the practical and theoretical aspects of machine tool processes. Students are instructed in the proper and safe use of hand tools, dealing equipment, basic blueprint interpretation, measuring instruments and gauges, layout and inspection techniques, and metals identification. Instruction will include the setup and operation of the drill press, band saw and pedestal grinder, and types of uses of abrasives. Students are introduced to simple lathe and milling machine operations and setups. CSU

MATEC-121  Machine Processes II
3 units  LR
36 hours lecture / 72 hours laboratory per term
Recommended: MATEC 120 or be able to demonstrate advanced machining skills
A study of advanced machine processes: the use of the milling machine and the dividing head differential, and angular indexing, helical and spur gear milling, development of acme, square, and multiple threads and the study of the properties of materials and alloys. CSU

MATEC-150  Topics in Machine Technology
1-3 units  SC
May be repeated three times
Variable hours
Selected topics in machine technology including NC computer programming, fundamentals of dimensional metrology, foundry practices, metal spinning. Specific topics to be announced. CSU

MATEC-220  Grinding Processes
3 units  LR
36 hours lecture / 72 hours laboratory per term
Recommended: MATEC 120 and 121 or be able to demonstrate advanced machining skills
An introduction to industrial grinding practices as applied to the machinist and tool making trades. CSU

MATEC-222  Introduction to Computer Numerical Control
3 units  LR
18 hour lecture / 90 hours laboratory per term
Designed to acquaint the student with various types of automation used in industry and to show the relationship of numerical control machine tools in proper perspective with traditional phases of automation. CSU
MATEC-298 Independent Study
.5-3 units SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract
noticed to department and instruction office; topics must extend study
beyond courses offered.
Selected students may pursue independent study of a particular
aspect of machine technology under the guidance of an instruc-
tor. CSU

Mathematics – MATH

Math and Computer Science Division
Rachel Westlake, Dean
Math Building 267
925-685-1230 x 2609

Possible career opportunities
Mathematicians work in a variety of fields, among them sta-
tistics, analysis, actuarial science, mathematical modeling,
computer programming, cryptography, research, and education.
More than two years of college study is usually required for
these career options. A strong background in mathematics is
also required for many careers in engineering, accounting and
finance, business administration, risk management, and busi-
ness forecasting, as well as for research in computer science,
social science, and the physical sciences.

Associate in arts degree - Mathematics
The associate degree in mathematics is a transfer degree for
students who wish to transfer to a four-year institution with a
major in Mathematics, Applied Mathematics, or Mathematics
for Secondary School Teachers. The degree offers students
a broad general education, while also preparing students for
upper division work in Mathematics. In addition, it prepares
students mathematically for upper division work in related fields
such as Physics, Chemistry, Engineering, Computer Science, and
Economics.

Major requirements for four-year programs differ from institution
to institution, so students wishing to transfer to a particular four-
year program should consult a counselor regarding the course
requirements for that program. Major requirements may only be
taken for a “for grade” basis. To earn a degree, students must
complete each course used to meet a major requirement with a
“C” grade or better. Certain courses may satisfy both a major
and a DVC general education requirement; however the units
are only counted once.

units
general education requirements ......................................... 27-38
major requirements
MATH 192 Analytic Geometry and Calculus I ...................... 4
MATH 193 Analytic Geometry and Calculus II .................... 4
MATH 194 Linear Algebra ............................................. 3
MATH 292 Analytic Geometry and Calculus III .................. 4

plus a minimum of 4 units from:
MATH 195 Discrete Mathematics ...................................... 4
MATH 294 Differential Equations .................................. 4

Total units for the major 18-19

units from a selection of degree applicable courses .......... 3-15

Total units for the degree 60

MATH-065 Arithmetic and Problem Solving
4 units SC
Not degree applicable
90 hours lecture / 36 hours laboratory per term
Note: each section has a scheduled 2 hours per week study
group (required). Students should check the schedule of
courses and reserve the associated times.
Students will learn how to do arithmetic and use it in their daily
lives. Topics include simple arithmetic operations and long mul-
tiplication and division of whole numbers, decimals, fractions,
percent, introduction to exponents and roots, and applications.
The course will incorporate the use of calculators and focus on
study habits needed to succeed in mathematics.

MATH-075 Pre/Algebra with Arithmetic Review
4 units SC
Not degree applicable
72 hours lecture / 18 hours laboratory / 18 hours laboratory
by arrangement per term
Recommended: MATH 065 or equivalent
Note: each section has a weekly 1 hour scheduled study
group and 1 hour laboratory by arrangement assignment.
Students should check the schedule of courses and reserve
the associated time. Some sections of this course have an
on-line component. Students will do their homework on-line as
detailed by the instructor.
Students will learn pre algebra, review arithmetic, and learn how
to use them in their daily lives. Topics include the arithmetic
operations, long multiplication and division, decimals, fractions,
percent, signed numbers, natural number exponents, order of
operations, introduction to the concept of variables, combining
like terms, solving linear equations, application problems and
the use of geometric formulas.

MATH-075SP Pre/Algebra with Arithmetic Review-
Self Paced
1-4 units SC
May be repeated three times
Variable hours
Recommended: MATH 065 or equivalent
Note: this is an open entry/open exit self-paced course,
based on completion of learning modules. Students who have
completed MATH 075 will not receive credit for MATH 075SP.
Students may not repeat modules of the course for which they
have already received credit. Students can earn at most 4
units for MATH 075SP: 4 units of MATH 075SP is equivalent
to MATH 075. Students cannot receive additional units for
modules already completed.
This personalized system of instruction involves working on
modules at your own pace and taking exams on each module.
Students will learn prealgebra, and review arithmetic, and they will learn how to use both in their daily lives. Topics include the arithmetic operations, long multiplication and division, decimals, fractions, percents, signed numbers, natural number exponents, order of operations, introduction to the concept of variables, combining like terms, solving linear equations, application problems and the use of geometric formulas.

MATH-080 Topics in Basic Skills Math
3-4 units SC
May be repeated three times
Not degree applicable
Variable hours
This is a supplemental course in mathematics to provide a variety of topics for basic skills students. Specific topics will be announced in the schedule of courses.

MATH-110 Elementary Algebra
4 units SC
90 hours lecture / 36 hours laboratory by arrangement per term
Prerequisite: MATH 075 or Math 075SP or equivalent
Note: Some sections of this course have an on-line component. Students will do their homework online as detailed by the instructor.
This course is an introduction to the techniques and reasoning of algebra, including linear equations and inequalities, development and use of formulas, algebraic expressions, systems of equations, graphs and introduction to quadratic equations.

MATH-110SP Elementary Algebra - Self Paced
1-4 units SC
May be repeated three times
Variable hours
Prerequisite: MATH 075 or Math 075SP or equivalent
Note: This is an open entry/open exit self-paced course based on completion of learning modules. Students may not repeat modules of the course for which they have already received credit. Students can earn at most 4 units of MATH 110SP; 4 units of MATH 110SP is equivalent to MATH 110. Students cannot receive additional units for modules already completed. Students who have completed MATH 110 will not receive credit for MATH 110SP.
Students will be introduced to algebra using a personalized system of instruction: This involves working on modules at your own pace and taking exams on each module. The topics include linear equations and inequalities, development and use of formulas, algebraic expressions, systems of equations, operations on polynomials factoring, graphs, and an introduction to quadratic equations.

MATH-114 Geometry
3 units SC
54 hours lecture / 36 hours laboratory by arrangement per term
Prerequisite: MATH 110 or Math 110SP or equivalent
Recommended: eligibility for ENGL 116/118 or equivalent
Students will use geometric definitions, axioms, and constructions and both inductive and deductive reasoning techniques to investigate the properties of lines, polygons, and circles. Students will prove geometric theorems, and derive and apply formulas for perimeter, area, and volume for a variety of plane and solid geometric objects.

MATH-120 Intermediate Algebra
4 units SC
90 hours lecture / 36 hours laboratory by arrangement per term
Prerequisite: MATH 110 or Math 110SP or equivalent
Note: Some sections of this course have an on-line component. Students will do their homework online as detailed by the instructor.
This course will expand upon the material covered in elementary algebra. Topics will include special products and factors, fractional equations, systems of linear equations, inequalities, conics, complex numbers, the binomial theorem, logarithms, and functions. The course is equivalent to a second year high school algebra course.

MATH-120SP Intermediate Algebra - Self Paced
1-4 units SC
May be repeated three times
Variable hours
Prerequisite: MATH 110 or Math 110SP or equivalent
Note: This is an open entry/open exit self-paced course based on completion of learning modules. Students may not repeat modules of the course for which they have already received credit. Students taking MATH 110SP must complete all 4 units in order to be eligible. Students can earn at most 4 units for MATH 120SP; 4 units of MATH 120SP is equivalent to MATH 120. Students cannot receive additional units for modules already completed. Students who have completed MATH 120 will not receive credit for MATH 120SP.
This personalized system of instruction involves working on modules at your own pace and taking exams on each module. The topics include special products and factors, fractional equations, systems of linear equations, inequalities, conics, complex numbers, the binomial theorem, logarithms, and functions. The course is equivalent to a second year school algebra course.

MATH-121 Plane Trigonometry
3 units SC
54 hours lecture / 36 hours laboratory by arrangement per term
Prerequisite: MATH 120 or Math 120SP or equivalent
Recommended: MATH 114 or equivalent
This course focuses on the theory and applications of trigonometry, including right triangle trigonometry, general angle trigonometry, and trigonometry on the unit circle, as well as trigonometric functions of real numbers. Applications include solutions of right and oblique triangles in problems in surveying, physics, engineering and navigation. CAN MATH 8, CSU
MATH-124  Math for Liberal Arts
3 units LR
54 hours lecture / 36 hours laboratory by arrangement per term
Prerequisite: MATH 120 or Math 120SP or equivalent
Students will learn how to apply techniques and concepts of intermediate algebra and critical thinking to the solving of contemporary problems in mathematics. The course is a survey of topics that may include (but are not limited to): exponential functions, logarithmic scales, probability, statistics, finance, matrix operations, logic and geometry. CAN MATH 2, CSU, UC units for MATH 135SP; 3 units of MATH 135SP is equivalent to MATH 135. Students cannot receive additional units for modules already completed.

MATH-135SP  College Algebra Self-Paced
1-3 units LR
May be repeated two times
Variable hours
Prerequisite: MATH 120 or Math 120SP or equivalent
Note: this is an open entry/open exit variable-unit class. Based on completion of learning modules. Students who have completed MATH 135 will not receive credit for MATH 135SP. Students may not repeat modules of the course for which they have already received credit. Students can earn at most 3

MATH-130  History of Mathematics
3 units LR
54 hours lecture per term / 36 hours laboratory by arrangement per term
Prerequisite: MATH 120 or Math 120SP or equivalent
Recommended: MATH 114 or equivalent; eligibility for ENGL 122 or equivalent
Note: formerly MATH 115
This course is designed for prospective elementary school teachers. It covers problem-solving strategies, the logical structure of arithmetic, signed numbers, fractions, decimals, percents, and topics in geometry, set theory, probability, and statistics, all as needed by elementary teachers. CAN MATH 4, CSU, UC

MATH-142  Elementary Statistics with Probability
3-4 units SC
3-4 units LR
72 hours lecture per term
Prerequisite: MATH 120 or Math 120SP or equivalent
Note: TI-83 or TI-84 graphing calculator required
This course is designed to introduce the student to the study of statistics and probability. Topics include descriptive statistics (organization of data, histograms and measures of central tendency and spread), linear correlation and regression, design of experiments, introductory probability, random variables, the normal distribution and Student’s t-distribution, and statistical inference, including confidence intervals and tests of significance. Use of a graphing calculator or computer for statistical analysis is required. CAN STAT 2, CSU, UC (credit limits may apply to UC – see counselor)

MATH-140  Tutor Training
.5-2 units SC
Variable hours
Prerequisite: MATH 191 or equivalent
Recommended: eligibility for ENGL 122 or equivalent
This course is designed for prospective elementary school teachers. It covers problem-solving strategies, the logical structure of arithmetic, signed numbers, fractions, decimals, percents, and topics in geometry, set theory, probability, and statistics, all as needed by elementary teachers. CAN MATH 4, CSU, UC

MATH-170  Topics in Mathematics
.3-4 units SC
May be repeated three times
Variable hours
A supplemental course in Mathematics to provide a study of current concepts and problems. Specific topics will be announced in the schedule of courses. CSU

MATH-181  Finite Mathematics
3 units LR
54 hours lecture per term
Prerequisite: MATH 120 or Math 120SP or equivalent
Note: this course has a technology requirement. See individual instructor for further information.
Application of intermediate algebra and critical thinking to solving contemporary problems in business and the life sciences. Topics include linear models, systems of linear equations and inequalities, linear programming (with geometric method and the simplex method), matrix equations, sets and probabilities,
MATH-182  Calculus for Management, Life Science and Social Science I
3 units LR
54 hours lecture per term
Prerequisite: MATH 135 or Math 135SP or equivalent
Note: not open to students who received credit for MATH 192 or equivalent
The first in a two-terminus calculus sequence for management, life science, and social science majors. Topics include the derivative and its applications (including curve sketching, optimization, and rates of change), an introduction to the integral (including Riemann sums and the Fundamental Theorem of Calculus) and its applications. CAN MATH 30+34, MATH 182+183 = CAN MATH SEQ D, CSU, UC (credit limits may apply to UC – see counselor)

MATH-183  Calculus for Management, Life Science and Social Science II
3 units LR
54 hours lecture per term
Prerequisite: MATH 182 or equivalent
Recommended: MATH 121 or equivalent
This is the second course in a two-terminus calculus sequence for management, life science, and social science majors and is a continuation of MATH 182. Topics include techniques of integration, applications of the integral, multivariable functions, differential equations, and Taylor polynomials. CAN MATH 92, MATH 182+183 = CAN MATH SEQ D, CSU, UC (credit limits may apply to UC – see counselor)

MATH-191  Pre-Calculus
4 units LR
90 hours lecture per week
Prerequisite: MATH 120 or MATH 120SP and MATH 121 or equivalent
Note: this course has a technology requirement. See individual instructor for further information
A thorough treatment of functions and their graphs, including polynomial, rational, logarithmic, exponential and trigonometric functions. Some sections on nonlinear systems, vectors and complex numbers. Use of a graphing calculator or a computer algebra system. CAN MATH 16, CSU, UC (credit limits may apply to UC – see counselor)

MATH-192  Analytic Geometry and Calculus I
4 units LR
90 hours lecture per term
Prerequisite: MATH 191 or equivalent
Recommended: eligibility for ENGL 122 or equivalent
Elements of analytic geometry, differentiation and integration of algebraic and transcendental functions with applications. Use of a graphing calculator or a computer algebra system is required. CAN MATH 18, MATH 192+193 = CAN MATH SEQ B; MATH 192+193+292 = CAN MATH SEQ C, CSU, UC (credit limits may apply to UC – see counselor)

MATH-193  Analytic Geometry and Calculus II
4 units LR
90 hours lecture per term
Prerequisite: MATH 192 or equivalent
Recommended: eligibility for ENGL 122 or equivalent
Continuation of MATH 192. Further techniques and applications of integration in geometry, science and engineering. Continued work with algebraic and transcendental functions. Numerical methods in evaluation of the integral. Infinite series, solving differential equations, and applications of differential equations. Polar coordinates, parametric equations and conic sections. CAN MATH 20, MATH 192+193 = CAN SEQ B; MATH 192+193+292 = CAN SEQ C, CSU, UC (credit limits may apply to UC – see counselor)

MATH-194  Linear Algebra
3 units LR
54 hours lecture per term
Prerequisite: MATH 193 or equivalent
Recommended: eligibility for ENGL 122 or equivalent
Introduction to linear algebra including vector spaces, matrices, determinants, bases, and linear transformations. Techniques for solving systems of equations using matrices, and applications of linear transformations. CAN MATH 26, CSU, UC

MATH-195  Discrete Mathematics
4 units LR
72 hours lecture per term
Prerequisite: MATH 193 or equivalent
Recommended: eligibility for ENGL 122 or equivalent
Introduction to propositional logic, induction, set theory, relations, and functions, counting and combinatorics, introduction to trees, graph theory, algorithms, algebraic structures. Emphasis on topics of interest to computer science students. CAN CSCI 26, CSU, UC

MATH-292  Analytic Geometry and Calculus III
4 units LR
90 hours lecture per term
Prerequisite: MATH 193 or equivalent
Recommended: eligibility for ENGL 122 or equivalent
Continuation of MATH 192. Further techniques and applications of integration in geometry, science and engineering. Continued work with algebraic and transcendental functions. Numerical methods in evaluation of the integral. Infinite series, solving differential equations, and applications of differential equations. Polar coordinates, parametric equations and conic sections. CAN MATH 20, MATH 192+193 = CAN SEQ B; MATH 192+193+292 = CAN SEQ C, CSU, UC

MATH-294  Differential Equations
4 units LR
90 hours lecture per term
Prerequisite: MATH 292 or equivalent
Recommended: MATH 194 or equivalent (may be taken concurrently)
Solutions to ordinary differential equations and introduction to partial differential equations, both the theory and the applications. CAN MATH 24, CSU, UC
MULTM.161. 3D Modeling and Animation II
MULTM.160. 3D Modeling and Animation I
MULTM.158. Cartoon Drawing for Digital Animation
MULTM.157. Multimedia for Web Delivery
MULTM.156. Audio Production for Digital Media
MULTM.155. Motion Graphics for Digital Media
MULTM.154. Interactive Authoring for Multimedia
MULTM.153. Introduction to Digital Audio
MULTM.149. Introduction to Digital Video
MULTM.148. Motion Graphics for Digital Media
MULTM.147. Interactive Authoring for Multimedia
MULTM.146. Introduction to Digital Media
MULTM.145. Introduction to Digital Video
MULTM.144. Multimedia for Web Delivery
MULTM.143. Audio Production for Digital Media
MULTM.142. Motion Graphics for Digital Media
MULTM.141. Interactive Authoring for Multimedia
MULTM.140. Introduction to Digital Video
MULTM.139. Multimedia for Web Delivery
MULTM.138. Audio Production for Digital Media
MULTM.137. Motion Graphics for Digital Media
MULTM.136. Interactive Authoring for Multimedia
MULTM.135. Introduction to Digital Video
MULTM.134. Multimedia for Web Delivery
MULTM.133. Audio Production for Digital Media
MULTM.132. Motion Graphics for Digital Media
MULTM.131. Interactive Authoring for Multimedia
MULTM.130. Introduction to Digital Video
MULTM.129. Multimedia for Web Delivery
MULTM.128. Audio Production for Digital Media
MULTM.127. Motion Graphics for Digital Media
MULTM.126. Interactive Authoring for Multimedia
MULTM.125. Introduction to Digital Video
MULTM.124. Multimedia for Web Delivery
MULTM.123. Audio Production for Digital Media
MULTM.122. Motion Graphics for Digital Media
MULTM.121. Interactive Authoring for Multimedia
MULTM.120. Introduction to Digital Video
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MULTM.115. Introduction to Digital Video
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MULTM.113. Audio Production for Digital Media
MULTM.112. Motion Graphics for Digital Media
MULTM.111. Interactive Authoring for Multimedia
MULTM.110. Introduction to Digital Video
MULTM.109. Multimedia for Web Delivery
MULTM.108. Audio Production for Digital Media
MULTM.107. Motion Graphics for Digital Media
MULTM.106. Interactive Authoring for Multimedia
MULTM.105. Introduction to Digital Video
MULTM.104. Multimedia for Web Delivery
MULTM.103. Audio Production for Digital Media
MULTM.102. Motion Graphics for Digital Media
MULTM.101. Interactive Authoring for Multimedia
MULTM.100. Introduction to Digital Video
MULTM.99. Multimedia for Web Delivery
MULTM.98. Audio Production for Digital Media
MULTM.97. Motion Graphics for Digital Media
MULTM.96. Interactive Authoring for Multimedia
MULTM.95. Introduction to Digital Video
MULTM.94. Multimedia for Web Delivery
MULTM.93. Audio Production for Digital Media
MULTM.92. Motion Graphics for Digital Media
MULTM.91. Interactive Authoring for Multimedia
MULTM.90. Introduction to Digital Video
MULTM.89. Multimedia for Web Delivery
MULTM.88. Audio Production for Digital Media
MULTM.87. Motion Graphics for Digital Media
MULTM.86. Interactive Authoring for Multimedia
MULTM.85. Introduction to Digital Video
MULTM.84. Multimedia for Web Delivery
MULTM.83. Audio Production for Digital Media
MULTM.82. Motion Graphics for Digital Media
MULTM.81. Interactive Authoring for Multimedia
MULTM.80. Introduction to Digital Video
MULTM.79. Multimedia for Web Delivery
MULTM.78. Audio Production for Digital Media
MULTM.77. Motion Graphics for Digital Media
MULTM.76. Interactive Authoring for Multimedia
MULTM.75. Introduction to Digital Video
MULTM.74. Multimedia for Web Delivery
MULTM.73. Audio Production for Digital Media
MULTM.72. Motion Graphics for Digital Media
MULTM.71. Interactive Authoring for Multimedia
MULTM.70. Introduction to Digital Video
MULTM.69. Multimedia for Web Delivery
MULTM.68. Audio Production for Digital Media
MULTM.67. Motion Graphics for Digital Media
MULTM.66. Interactive Authoring for Multimedia
MULTM.65. Introduction to Digital Video
MULTM.64. Multimedia for Web Delivery
MULTM.63. Audio Production for Digital Media
MULTM.62. Motion Graphics for Digital Media
MULTM.61. Interactive Authoring for Multimedia
MULTM.60. Introduction to Digital Video
MULTM.59. Multimedia for Web Delivery
MULTM.58. Audio Production for Digital Media
MULTM.57. Motion Graphics for Digital Media
MULTM.56. Interactive Authoring for Multimedia
MULTM.55. Introduction to Digital Video
MULTM.54. Multimedia for Web Delivery
MULTM.53. Audio Production for Digital Media
MULTM.52. Motion Graphics for Digital Media
MULTM.51. Interactive Authoring for Multimedia
MULTM.50. Introduction to Digital Video
MULTM.49. Multimedia for Web Delivery
MULTM.48. Audio Production for Digital Media
MULTM.47. Motion Graphics for Digital Media
MULTM.46. Interactive Authoring for Multimedia
MULTM.45. Introduction to Digital Video
MULTM.44. Multimedia for Web Delivery
MULTM.43. Audio Production for Digital Media
MULTM.42. Motion Graphics for Digital Media
MULTM.41. Interactive Authoring for Multimedia
MULTM.40. Introduction to Digital Video
MULTM.39. Multimedia for Web Delivery
MULTM.38. Audio Production for Digital Media
MULTM.37. Motion Graphics for Digital Media
MULTM.36. Interactive Authoring for Multimedia
MULTM.35. Introduction to Digital Video
MULTM.34. Multimedia for Web Delivery
MULTM.33. Audio Production for Digital Media
MULTM.32. Motion Graphics for Digital Media
MULTM.31. Interactive Authoring for Multimedia
MULTM.30. Introduction to Digital Video
MULTM.29. Multimedia for Web Delivery
MULTM.28. Audio Production for Digital Media
MULTM.27. Motion Graphics for Digital Media
MULTM.26. Interactive Authoring for Multimedia
MULTM.25. Introduction to Digital Video
MULTM.24. Multimedia for Web Delivery
MULTM.23. Audio Production for Digital Media
MULTM.22. Motion Graphics for Digital Media
MULTM.21. Interactive Authoring for Multimedia
MULTM.20. Introduction to Digital Video
MULTM.19. Multimedia for Web Delivery
MULTM.18. Audio Production for Digital Media
MULTM.17. Motion Graphics for Digital Media
MULTM.16. Interactive Authoring for Multimedia
MULTM.15. Introduction to Digital Video
MULTM.14. Multimedia for Web Delivery
MULTM.13. Audio Production for Digital Media
MULTM.12. Motion Graphics for Digital Media
MULTM.11. Interactive Authoring for Multimedia
MULTM.10. Introduction to Digital Video
MULTM.9. Multimedia for Web Delivery
MULTM.8. Audio Production for Digital Media
MULTM.7. Motion Graphics for Digital Media
MULTM.6. Interactive Authoring for Multimedia
MULTM.5. Introduction to Digital Video
MULTM.4. Multimedia for Web Delivery
MULTM.3. Audio Production for Digital Media
MULTM.2. Motion Graphics for Digital Media
MULTM.1. Interactive Authoring for Multimedia

Possible career opportunities
Multimedia or graphic design jobs cover all ends of the creative spectrum. Some possible career options include website designer/developer, multimedia designer, computer-grap...
Multimedia

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSGR 214</td>
<td>Introduction to Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>BUSMG 191</td>
<td>Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>COMSC 095</td>
<td>WWW Publishing with HTML</td>
<td>1</td>
</tr>
<tr>
<td>COMSC 096</td>
<td>Advanced WWW Publishing</td>
<td>1</td>
</tr>
<tr>
<td>COMSC 255</td>
<td>Programming with Java</td>
<td>4</td>
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<tr>
<td>COMSC 265</td>
<td>Advanced Programming with C and C++</td>
<td>2</td>
</tr>
<tr>
<td>L 114</td>
<td>Developing and Managing Web Pages</td>
<td>2</td>
</tr>
<tr>
<td>MULTM 100</td>
<td>Introduction to Multimedia Workstations</td>
<td>1</td>
</tr>
<tr>
<td>MULTM 115</td>
<td>Digital Imaging Process and Technique III</td>
<td>3</td>
</tr>
<tr>
<td>MULTM 117</td>
<td>Digital Illustration</td>
<td>3</td>
</tr>
<tr>
<td>MULTM 120</td>
<td>Interactive Authoring for Multimedia</td>
<td>3</td>
</tr>
<tr>
<td>MULTM 140</td>
<td>Motion Graphics for Digital Media</td>
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</tr>
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<td>MULTM 145</td>
<td>Intermediate Digital Video Production</td>
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</tr>
<tr>
<td>MULTM 160</td>
<td>3D Modeling and Animation I</td>
<td>3</td>
</tr>
<tr>
<td>MULTM 161</td>
<td>3D Modeling and Animation II</td>
<td>3</td>
</tr>
<tr>
<td>MULTM 165</td>
<td>Cartoon Drawing for Digital Animation</td>
<td>3</td>
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<tr>
<td>MULTM 170</td>
<td>Multimedia for Web Delivery</td>
<td>3</td>
</tr>
<tr>
<td>MULTM 171</td>
<td>Web Design</td>
<td>3</td>
</tr>
<tr>
<td>MULTM 175</td>
<td>Flash Interactivity</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 172</td>
<td>Introduction to Electronic Music and MIDI</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 173</td>
<td>Synthesis, Sampling, and MIDI</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 174</td>
<td>Introduction to Pro Tools</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total units for the major**: 32-33

**Electives**

Units from a selection of degree applicable courses: 0-1

**Total units for the degree**: 60-68

**Certificate of achievement - Multimedia advanced specializations**

The multimedia studies program prepares students for entry level employment in one of six specialty areas of the multimedia industry: Character Animation, Digital Audio, Digital Imaging, Motion Graphics, 3D Modeling and Animation, and Web Design. This program of study will provide students with the design and technical skills needed for creating non-linear interactive digital media. Students will participate in a collaborative team-oriented learning experience that mirrors the multimedia industry design and production process. Additionally, students will explore multimedia career opportunities and develop a professional digital media portfolio for entry into the workforce.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a "C" grade or better. Required courses are available in the evening and during the day.

**Required courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 105</td>
<td>Introduction to Drawing, Color, and Two-Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>MULTM 110</td>
<td>Digital Imaging Process and Technique I</td>
<td>1.5</td>
</tr>
<tr>
<td>MULTM 111</td>
<td>Digital Imaging Process and Technique II</td>
<td>1.5</td>
</tr>
<tr>
<td>MULTM 130</td>
<td>Introduction to Digital Audio</td>
<td>1.5</td>
</tr>
<tr>
<td>MULTM 149</td>
<td>Introduction to Digital Video</td>
<td>1.5</td>
</tr>
<tr>
<td>MULTM 190</td>
<td>Projects in Multimedia</td>
<td>3</td>
</tr>
<tr>
<td>MULTM 191</td>
<td>Multimedia Portfolio Development</td>
<td>3</td>
</tr>
</tbody>
</table>

**plus 8-9 units from one of the 6 specialty areas listed below:**

**Character animation**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>ART 107</td>
<td>Figure Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>MULTM 165</td>
<td>Cartoon Drawing for Digital Animation</td>
<td>3</td>
</tr>
<tr>
<td>MULTM 170</td>
<td>Multimedia for Web Delivery</td>
<td>3</td>
</tr>
</tbody>
</table>

**Digital audio**

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>MUSIC 172</td>
<td>Introduction to Electronic Music and MIDI</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 173</td>
<td>Synthesis, Sampling, and MIDI</td>
<td>3</td>
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</tbody>
</table>

**Digital imaging**

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</thead>
<tbody>
<tr>
<td>ART 112</td>
<td>Digital Imaging for the Artist</td>
<td>3</td>
</tr>
<tr>
<td>BUSGR 214</td>
<td>Introduction to Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>MULTM 115</td>
<td>Digital Imaging Process and Technique III</td>
<td>3</td>
</tr>
</tbody>
</table>

**Motion graphics**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>MULTM 120</td>
<td>Interactive Authoring for Multimedia</td>
<td>3</td>
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<tr>
<td>MULTM 140</td>
<td>Motion Graphics for Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>MULTM 170</td>
<td>Multimedia for Web Delivery</td>
<td>3</td>
</tr>
</tbody>
</table>

**3D modeling and animation**

<table>
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<tr>
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<tbody>
<tr>
<td>MULTM 160</td>
<td>3D Modeling and Animation I</td>
<td>3</td>
</tr>
<tr>
<td>MULTM 161</td>
<td>3D Modeling and Animation II</td>
<td>3</td>
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<tr>
<td>MULTM 165</td>
<td>Cartoon Drawing for Digital Animation</td>
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**Web design**

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<tbody>
<tr>
<td>COMSC 095</td>
<td>WWW Publishing with HTML</td>
<td>1</td>
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<tr>
<td>COMSC 096</td>
<td>Advanced WWW Publishing</td>
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<tr>
<td>MULTM 170</td>
<td>Multimedia for Web Delivery</td>
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<tr>
<td>MULTM 171</td>
<td>Web Design</td>
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</table>

**plus at least 9 units from:**

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<tr>
<td>ART 106</td>
<td>Drawing and Composition</td>
<td>3</td>
</tr>
<tr>
<td>ART 107</td>
<td>Figure Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 112</td>
<td>Digital Imaging for the Artist</td>
<td>3</td>
</tr>
<tr>
<td>ART 125</td>
<td>Color Theory and Its Application to Painting</td>
<td>3</td>
</tr>
<tr>
<td>BUS 109</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUSGR 214</td>
<td>Introduction to Graphic Design</td>
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<td>MULTM 100</td>
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<td>Motion Graphics for Digital Media</td>
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<td>MULTM 171</td>
<td>Web Design</td>
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</table>
MULTM 175 Flash Interactivity .......................... 3
MUSIC 172 Introduction to Electronic Music and MIDI ... 3
MUSIC 173 Synthesis, Sampling and MIDI Sequencing.............. 3
MUSIC 174 Introduction to Pro Tools ...................... 3

Total units required  32-33

Note: there may be no duplication of course units between specialty area requirements and elective courses.

Certificate of completion - Foundation

Multimedia is a set of technologies and techniques that can be used to enhance the presentation of information. Multimedia uses computers to create productions that bring together text, sounds, animation, graphic art and video to educate, inform and entertain. Classes are designed to serve both working professionals who wish to upgrade their skills and students who wish to enter the field.

To earn a certificate of completion, students must complete each course used to meet a certificate requirement with a “C” grade or better. Required courses are available in the evening and during the day.

required courses units
ART 115 Introduction to Drawing, Color, and Two Dimensional Design .................................. 3
MULTM 110 Digital Imaging Process and Technique I ... 1.5
MULTM 111 Digital Imaging Process and Technique II ... 1.5
MULTM 130 Introduction to Digital Audio ................. 1.5
MULTM 149 Introduction to Digital Video .................. 1.5

plus at least 6 units from:
ART 112 Digital Imaging for the Artist .................... 3
BUSGR 214 Introduction to Graphic Design ............... 3
COMSC 095 WWW Publishing with HTML ................ 1
COMSC 096 Advanced WWW Publishing ..................... 1
MULTM 100 Introduction to Multimedia Workstations ... 1
MULTM 115 Digital Imaging Process and Technique III ... 3
MULTM 117 Digital Illustration ................................. 3
MULTM 120 Interactive Authoring for Multimedia .......... 3
MULTM 140 Motion Graphics for Digital Media .......... 3
MULTM 145 Intermediate Digital Video Production .......... 3
MULTM 160 3D Modeling and Animation I .................. 3
MULTM 161 3D Modeling and Animation II .................. 3
MULTM 165 Cartoon Drawing for Digital Animation ........ 3
MULTM 170 Multimedia for Web Delivery ..................... 3
MULTM 171 Web Design ........................................... 3
MULTM 175 Flash Interactivity ................................ 3
MUSIC 172 Introduction to Electronic Music and MIDI ... 3
MUSIC 173 Synthesis, Sampling and MIDI Sequencing ....... 3
MUSIC 174 Introduction to Pro Tools ...................... 3

Total units required  15

MULTM-100 Introduction to Multimedia Workstations
1 unit SC
18 hours lecture per term
This course introduces students to the basic features of multimedia workstations. Students will have the opportunity to familiarize themselves with Windows or Macintosh workstations and multimedia accessory equipment. The course will involve hands-on work with a variety of digital workstations and multimedia software applications. CSU

MULTM-110 Digital Imaging Process and Technique I
1.5 units SC
18 hours lecture / 27 hours laboratory per term
Recommended: basic computer editing and file management skills
This course is an introduction to digital imaging. The course will provide students with direct hands-on experience creating computer images and with experience in editing digital images from scanned graphics and digital photography. CSU

MULTM-111 Digital Imaging Process and Technique II
1.5 units SC
May be repeated once
18 hours lecture / 27 hours laboratory per term
Recommended: MULTM 110 or equivalent
This is a course that builds on the introductory concepts of digital imaging. Students will engage in production of digital images suitable for printing and multimedia applications. Emphasis is on composition, practical color theory, and advanced software topics such as the use of masks, paths, and further exploration of layers. CSU

MULTM-115 Digital Imaging Process and Technique III
3 units SC
May be repeated once
36 hours lecture / 54 hours laboratory per term
Recommended: MULTM 111 or equivalent
This is a course that builds on the intermediate concepts of digital imaging. Students will engage in production of bitmap and vector images suitable for printing, multimedia presentations and web delivery. Topics will include advanced use of alpha channels, advanced color correction, advanced production text, import / export issues and imaging for the web. The course will involve hands-on work with a variety of digital workstations and multimedia software applications. CSU

MULTM-117 Digital Illustration
3 units SC
May be repeated once
36 hours lecture / 54 hours laboratory per term
Recommended: MULTM 111 or equivalent
Note: course may be repeated only when software is revised.
This course introduces students to digital illustration. Students will engage in the production of vector graphics suitable for
production, multimedia presentation and the web. Instruction will utilize a variety of software programs including Adobe Illustrator and Macromedia Freehand. CSU

MULTM-120 Interactive Authoring for Multimedia
3 units SC
May be repeated once
36 hours lecture / 54 hours laboratory per term
Recommended: MULTM 110 or equivalent
This course is an introduction to interactive authoring for multimedia projects. Students will create multimedia presentations using digital audio, video, graphics, text, computer animation and interactivity. The course will involve hands-on work with a variety of digital workstations and multimedia software applications. CSU

MULTM-130 Introduction to Digital Audio
1.5 units SC
May be repeated once
18 hours lecture / 27 hours laboratory per term
Recommended: basic computer editing and file management skills
This is an introductory course about the application of audio to various forms of digital media. The course covers how to capture, edit and create digital audio for CD-ROM, video and the Internet. The course will involve hands-on work with a variety of digital workstations and multimedia software applications. CSU

MULTM-131 Audio Production for Digital Media
3 units SC
May be repeated once
36 hours lecture / 54 hours laboratory per term
Recommended: MULTM 130 or equivalent
This course will cover audio production techniques for digital media. Topics will include digital multitrack recording, effects processing, streaming media and the integration of audio within a variety of digital media. The course will involve hands-on work with a variety of digital workstations and multimedia software applications. CSU

MULTM-140 Motion Graphics for Digital Media
3 units SC
May be repeated once
36 hours lecture / 54 hours laboratory per term
Recommended: MULTM 130 or equivalent
This is an introductory course in motion graphics utilizing digital video and various graphics file formats. Students will learn how to create animations and output them for presentation on CD-ROM, the web and video tape. The course will involve hands-on work with a variety of digital workstations and applications. CSU

MULTM-145 Intermediate Digital Video Production
3 units SC
May be repeated once
36 hours lecture / 54 hours laboratory per term
Recommended: MULTM 149 or equivalent
Note: course may be repeated only when software is revised.
This course will expose students to advanced digital video production through the study of both editing and footage acquisi-

MULTM-149 Introduction to Digital Video
1.5 units SC
May be repeated once
18 hours lecture / 27 hours laboratory per term
Recommended: basic computer editing and file management skills
This is an introductory course about the application of video to various forms of digital media. The course covers how to capture, edit and create digital video for CD-ROM, interactive computer presentations, and the Internet. The course will involve hands-on work with a variety of digital workstations and multimedia software applications. CSU

MULTM-150 Topics in Multimedia
5-4 units SC
May be repeated three times
Variable hours
Supplementary topics to the multimedia curriculum designed to provide a study of current concepts and problems in multimedia. Specific topics will be announced. CSU

MULTM-160 3D Modeling and Animation I
3 units SC
May be repeated once
36 hours lecture / 54 hours laboratory per term
Recommended: MULTM 110 or equivalent
This course is an introduction to the basic principles of computer-generated 3D modeling and animation. This course emphasizes the modeling and display of objects and environments using 3D modeling, surface and lighting, and animation software tools. The course will involve hands-on work with a variety of digital workstations and multimedia software applications. CSU

MULTM-161 3D Modeling and Animation II
3 units SC
May be repeated once
36 hours lecture / 54 hours laboratory per term
Recommended: MULTM 160 or equivalent
Building on the skills acquired in 3D Modeling and Animation I, this course will focus on the creation of short animated movies. Students will explore the principles that govern animation and learn techniques for implementing them in 3D. The course will involve hands-on work with a variety of digital workstations and multimedia software applications. CSU

MULTM-165 Cartoon Drawing for Digital Animation
3 units SC
May be repeated once
36 hours lecture / 54 hours laboratory per term
Recommended: ART 105 or equivalent
Note: course may be repeated only when software is revised.
This course will introduce students to the skills necessary to script and story board animations. It is designed to prepare stu-
MULTM-170 Multimedia for Web Delivery
3 units SC
May be repeated once
36 hours lecture / 54 hours laboratory per term
Recommended: MULTM 110 or equivalent
This course will provide an introduction to web design which includes fundamentals of cell-based animation and the integration of sound and video elements. Design concepts that are unique to the World Wide Web's nonlinear, interactive features are emphasized. Publishing multimedia websites will also be covered. The course will also involve hands-on work with a variety of computer work stations and applications. CSU

MULTM-171 Web Design
3 units SC
May be repeated once
36 hours lecture / 54 hours laboratory per term
Recommended: MULTM 110 or equivalent
This course will cover concepts of designing and producing for the World Wide Web. Students will learn basic interactive design and technical skills for creating websites. An emphasis is placed on information architecture, navigation, and interface design in order to create effective and exciting online environments. The course will involve hands-on work with a variety of desktop workstations and multimedia software applications. CSU

MULTM-175 Flash Interactivity
3 units SC
May be repeated once
36 hours lecture / 54 hours laboratory per term
Recommended: MULTM 110 or equivalent
Note: course may be repeated only when software is revised.
This course will introduce students to the interactive possibilities of Macromedia Flash's programming language, Action script. Basic programming principles will be covered to introduce students to the thought processes necessary to design interactive projects. This basic knowledge of programming will be adapted for use in developing interactive animated projects in Macromedia's Flash authoring environment. CSU

MULTM-190 Projects in Multimedia
3 units SC
May be repeated three times
36 hours lecture / 54 hours laboratory per term
Recommended: ART 105, MULTM 110, 111, 130, 149 or equivalents
This advanced course is designed for students who are preparing for employment in the multimedia industry. Students will work on special production-oriented projects in multimedia. Working independently and in teams, students will use the design, tool, and business skills they have developed in prior semesters. Students will involve themselves in the production process and create presentations combining a variety of digital media. CSU

MULTM-191 Multimedia Portfolio Development
3 units SC
May be repeated once
36 hours lecture / 54 hours laboratory per term
Recommended: MULTM 190 or equivalent
This advanced course is designed for students who are preparing for employment in the multimedia industry. Students will explore multimedia career opportunities and the basic principles of professional portfolio preparation for digital media. Students will have the opportunity to develop professional portfolios and present their own portfolios to their class peers. CSU

MULTM-195 Applied Production For Digital Media
3 units SC
May be repeated three times
36 hours lecture / 54 hours laboratory per term
Recommended: MULTM 190 or equivalent
This course is designed to give students applied production and business experience with a wide variety of client-driven multimedia projects. Working independently and in teams, students will build upon the design, tool, and business skills developed in prior coursework. Students will involve themselves in the production process and create projects to meet client specifications. Students will also be intimately involved with the decision making process for running an independent multimedia business. Projects will vary significantly from semester to semester as well as within the course of a semester. CSU

Music – MUSIC
Applied and Fine Arts Division
Dean of Applied and Fine Arts
Humanities Building 112 and 113
925-685-1230 x 2312

Possible career opportunities
Music prepares students for careers as performers, teachers, composers, historians, arts administrators, and more. Career options include: conductor, arranger, film scorer/composer, music business/manager, music editor, music supervisor/director, songwriter, transcriber, editor (print music publishing), choir director, midi engineer, recording engineer, studio director or manager, sound designer, music therapist, instrumental soloist, sound technician, and tour coordinator. Many careers require more than two years of study.

Certificate of completion
Music industry studies-Commercial music
Music industry studies-Recording arts

Certificate of completion - Music industry studies - commercial music
This program prepares students for careers in the commercial music industry as performers, songwriters, producers, and
arrangers. Students will learn about the music industry in an overview of corporate structure and legal practices including contracts, copyrights, licenses and royalties, and music literature in an introduction and history of jazz and rock music. Students have the opportunity to choose their performance specialty and to take elective courses in music recording, production and songwriting. Courses are designed to serve both working professionals seeking to upgrade their skills and students who wish to enter the field.

To earn a certificate of completion, students must complete each course used to meet a certificate requirement with a “C” grade or better. Certificate requirements may only be completed by attending a combination of day and evening classes.

required courses

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<td>MUSIC 182</td>
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Total units required 17

Music

Certificate of completion - Music industry studies - Recording arts

Today’s music industry is driven by sophisticated audio technology. The music industry, along with a growing number of manufacturing and information delivery industries, needs audio experts and musicians with technical skills and production experience.

Students will learn about the creation and production of recordings of music, and will learn how to successfully complete recording projects that are typical of those found in contemporary professional recording and production environments. The student’s mastery of the discipline will be shown through the completion of recording and production projects of professional quality.

To earn a certificate of completion, students must complete the required courses with a “C” grade or better. Certificate requirements may only be completed by attending a combination of day and evening classes.

required courses

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Total units required 17

MUSIC-100 Individual Studio Instruction

2 units LR
May be repeated three times
27 hours lecture / 108 hours laboratory by arrangement per term
Prerequisite: audition required

MUSIC-101 Beginning Guitar

1 unit SC
May be repeated once
54 hours lecture per term
Note: student must provide an acoustic guitar for use in the course.

This course is the study of the fundamentals and basics necessary to play the six-string acoustic guitar in both folk and classical styles. Basic first position keys and chords, harmonization by ear, transposition, various strums and styles, finger-picking accompaniments, bass notes, basic music theory, and note reading are taught. No previous musical experience necessary. CSU, UC
MUSIC-102 Intermediate Guitar
1 unit SC
May be repeated once
54 hours laboratory per term
Recommended: MUSIC 101 or equivalent
Note: student must provide an acoustic guitar for use in the course.
This course is the continued study and practice of the fundamentals for playing the six-string acoustic guitar. An expanded repertoire of popular songs, classical solo and ensemble music, and styles will be examined. Barre chords, basic keys, transcription with and without the use of a capo, advanced strums and arpeggios, bass runs, scales, and classical theory are taught. CSU, UC

MUSIC-103 Guitar Ensemble
1 unit SC
May be repeated once
54 hours laboratory per term
Recommended: MUSIC 101 or MUSIC 102 or equivalent
Note: student must provide an acoustic guitar for use in the course.
This course is the study of the acoustic guitar in solo and ensemble music. Topics will include a variety of styles and techniques used in guitar performance. Basic note reading skills will be employed. CSU, UC

MUSIC-104 Advanced Guitar Ensemble
1 unit SC
May be repeated once
54 hours laboratory per term
Recommended: MUSIC 103 or equivalent
Note: student must provide an acoustic guitar for use in the course.
This course is the continued instruction for advanced level guitar ensemble playing. Students will be expected to learn and play from an expanded repertoire of ensemble music arranged for up to eight parts. The repertoire features the music of Bach, Haydn, and other classical masters which have been transcribed for guitar ensemble. CSU, UC

MUSIC-105 Intermediate Electric Guitar
1 unit SC
May be repeated once
54 hours laboratory per term
Recommended: MUSIC 101 or audition; eligibility for ENGL 118 or equivalent
Theory and performance of American contemporary music in the blues, rhythm and blues, rock and roll, country, and funk idioms. Lectures by guest artists and industry experts. Critical comparisons will empower the student to identify and perform as a lead or rhythm guitarist in each of these styles. CSU, UC

MUSIC-106 Advanced Electric Guitar
1 unit SC
May be repeated once
54 hours laboratory per term
Recommended: MUSIC 122 or concurrent enrollment in MUSIC 122 or equivalent (instructor to evaluate), MUSIC 105 or audition; eligibility for ENGL 118 or equivalent
Theory and performance of American contemporary music in the jazz, rock, metal, and fusion idioms. Lectures by guest artists and industry experts. Critical comparisons will empower the student to identify and perform as a lead guitarist in each of these styles. CSU, UC

MUSIC-120 Introduction to Music Skills
3 units SC
108 hours lecture per term
Recommended: eligibility for ENGL 122
A music fundamentals course including music reading, ear training, sight singing, keyboarding knowledge, notation, key and time signatures, intervals, scales and chords through group participation. This course is intended for the general music student. CSU, UC (credit limits may apply to UC – see counselor)

MUSIC-122 Theory and Musicianship I
5 units SC
108 hours lecture per term
Recommended: MUSIC 150 or equivalent keyboard proficiency
This course is a study of the fundamentals of Western music applicable to both classical and popular styles: notation; fundamental theoretical concepts; musicianship skills including sight singing, rhythmic training, ear training, dictation, and keyboard realization; and basic compositional skills. CAN MUS 2 MUSIC 122+123 = CAN MUS SEQ A, CSU, UC

MUSIC-123 Theory and Musicianship II
5 units SC
108 hours lecture per term
Recommended: MUSIC 122 or equivalent
This course is a study of harmonic techniques used in the Western Common Practice and addresses diatonic harmony and four-part voice leading, musical structures, basic composition, basic harmonic and structural analysis, and musicianship skills including sight singing, rhythmic training, ear training, dictation, and keyboard realization. CAN MUS 4 MUSIC 122+123 = CAN MUS SEQ A, CSU, UC

MUSIC-124 Introduction to Music Production and Multi-Track Recording for Musicians
3 units SC
54 hours lecture / 18 hours laboratory per term
This course is designed to give the music student a working knowledge of the principles and techniques of multitrack recording; to explore, analyze and evaluate contemporary music production techniques and to apply these techniques to real production and recording situations. Emphasis will be on student involvement with various interrelated roles, including that of studio musician, writer / arranger, producer and sound engineer. CSU
MUSIC-125 Advanced Music Production and Multi-Track Recording for Musicians
3 units SC
54 hours lecture / 18 hours laboratory per term
Recommended: MUSIC 124 or equivalent
This course extends basic practical music production and multi-track recording skills to include more complex projects, integration of acoustic and MIDI recording elements, and use of current computer software in the mixing process. CSU

MUSIC-127 Jazz Theory and Improvisation
.5-1 unit SC
May be repeated three times
Variable hours
Recommended: audition required and ability to perform at an intermediate level on a musical instrument; MUSIC 122 and eligibility for ENGL 122 or equivalent
The study and performance of jazz music with emphasis on improvisation and writing for the small jazz ensemble. Lecture-demonstration, small group (combo), and individualized instruction through listening and playing of recordings. CSU, UC

MUSIC-139 Marching Band Techniques
1 unit LR
May be repeated three times
54 hours laboratory per term
Recommended: ability to perform on a woodwind, brass, or percussion instrument
Rehearsal and performance of marching band activities - parade and field show. Class will study and coordinate drill routines with a variety of styles. CSU, UC (credit limits may apply to UC – see counselor)

MUSIC-150 Beginning Piano I
1 unit SC
54 hours lecture per term
This course provides group instruction in piano for students with no prior keyboard experience. Students will learn ensemble and solo works, acquire basic rhythm, and develop fundamental keyboard and music theory skills based on major and minor five-note patterns. This course is designed for both music majors planning to transfer, as well as for students who are studying primarily for personal enjoyment. Attention is given to the student’s individual needs, goals, and abilities. CSU, UC

MUSIC-151 Beginning Piano II
1 unit SC
54 hours laboratory per term
Recommended: MUSIC 150 or equivalent
Group instruction in piano for the student who has had Beginning Piano I or its equivalent. CSU, UC

MUSIC-152 Jazz Piano
1 unit SC
May be repeated once
54 hours laboratory per term
Recommended: MUSIC 151 or equivalent
The theory and practice of jazz piano through the study of chords, voicing, improvisational techniques, and various styles of the jazz idiom. CSU, UC

MUSIC-154 Beginning Woodwind Instruments
1 unit SC
May be repeated once
54 hours laboratory per term
Beginning instruction on flute, clarinet, oboe, saxophone, and bassoon for the general college student as well as the music major or minor intending to learn a second instrument. Course includes fundamentals of tone, articulation, and instrumental technique. CSU, UC

MUSIC-155 Beginning Brass Instruments
1 unit SC
May be repeated once
54 hours laboratory per term
Beginning instruction on trumpet, French horn, trombone, baritone, and tuba for the general college student as well as the music major or minor intending to learn a second instrument. Course includes fundamentals of tone, articulation, and instrumental technique. CSU, UC

MUSIC-156 String Instruments
1 unit SC
May be repeated once
54 hours laboratory per term
Beginning instruction on violin, viola, cello, and string bass for the general college student as well as the music major or minor intending to learn a second instrument. Course includes fundamentals of tone, articulation, and instrumental technique. CSU, UC

MUSIC-157 Beginning Percussion Instruments
1 unit SC
May be repeated once
54 hours laboratory per term
Beginning instruction on percussion instruments for the general college student as well as the music major or minor intending to learn a second instrument. Instruments include snare drum, bass drum, timpani, drum set, xylophone, marimba, and bells. CSU, UC

MUSIC-158 Applied Organ Instruction
1 unit SC
May be repeated once
54 hours laboratory per term
Recommended: MUSIC 150 or equivalent
This course is a study of the fundamentals of classical organ performance, including beginning manual and pedal techniques integrated with organ compositions for technical reinforcement, and elements of organ registration and interpretation. Pipe
organ design and developing a sense of historical style are also addressed. Students will acquire a beginning classical organ repertoire suitable for performance. Introduction to hymn playing skills is available. CSU, UC

MUSIC-159 Intermediate Orchestral Strings
1 unit SC
May be repeated once
54 hours laboratory per term
Recommended: equivalent of two terms of classwork or private study in beginning strings
Class instruction in intermediate string techniques and orchestral playing techniques. Students will perform on one instrument. CSU, UC

MUSIC-170 Applied Voice Training
1 unit SC
May be repeated three times
54 hours lecture per term
This course is a study of the fundamentals of vocal tone production, breathing, vocal placement, and song interpretation as it applies to standard vocal repertoire. CSU, UC

MUSIC-171 Jazz and Popular Solo Voice
1 unit SC
May be repeated three times
54 hours lecture per term
This course is a study of the fundamentals of vocal tone production, breathing, vocal placement, and song interpretation as it applies to jazz and popular vocal repertoire. CSU, UC

MUSIC-172 Introduction to Electronic Music and MIDI
3 units SC
May be repeated once
36 hours lecture / 54 hours laboratory per term
An introduction to synthesizers, computers and MIDI (Musical Instrument Digital Interface). Students will gain direct experience with multi-timbral synthesizers and tone generators, digital signal processors, and computer sequencing software. CSU

MUSIC-173 Synthesis, Sampling, and MIDI Sequencing
3 units SC
May be repeated once
36 hours lecture / 54 hours laboratory per term
Recommended: MUSIC 172 or equivalent
A study of sound synthesis and sampling techniques. Students will gain direct, hands-on experience with a variety of synthesizers, samplers and digital signal processors. Topics include advanced MIDI sequencing methods, and the integration of MIDI and digital audio recording. CSU

MUSIC-174 Introduction to Pro Tools
3 units SC
May be repeated once
36 hours lecture / 54 hours laboratory per term
Note: may be repeated once if different software is used.
This is an introductory course that will provide the foundational skills to learn and function within the Pro Tools audio production environment. Pro Tools represents a new generation of digital audio workstations that use the power of personal computers and digital signal processing to record multitrack digital audio directly to hard disk. Topics will include digital multitrack recording, effects processing and digital audio mixing techniques. CSU

MUSIC-175 Applied Pro Tools
3 units SC
May be repeated once
36 hours lecture / 54 hours laboratory per term
Recommended: MUSIC 174 or equivalent
Note: may be repeated once if different software is used
This advanced course is designed for students who are preparing for employment in the music recording industry. Students will work on special production-oriented projects utilizing a Pro Tools capable digital audio workstation (DAW). Working independently and in teams, students will use the recording production tools that they have developed in prior semesters. Topics include acoustic recording, field recording, sound design, sound for picture, MIDI control surfaces, use of external signal processors, surround sound, and advanced mixing techniques. CSU

MUSIC-177 Introduction to Reason and ACID
3 units SC
May be repeated twice
36 hours lecture / 54 hours laboratory per term
Note: may be repeated once if different software is used.
This course will provide the foundational skills needed to learn and function within the music production environments of Reason and ACID. These software applications represent a new generation of the stand-alone virtual studio. Topics will include music sequencing, digital audio recording, software synthesis and sampling, virtual effects, automation, signal flow, drum players, and beat matching. CSU

MUSIC-181 Introduction to the Music Industry
2 units SC
36 hours lecture per term
Recommended: eligibility for ENGL 122
An introduction to the music industry, including its corporate structure and legal practices such as contracts, copyrights, licenses and royalties. Other topics include production logistics in the recording studio, record manufacturing, music publishing, marketing, touring, and career strategies. CSU

MUSIC-182 Songwriting
3 units SC
54 hours lecture per term
This course is an introduction to modern song writing techniques. Students will learn to create their own musical compositions. Approaches to contemporary issues in song writing
including, development of melodic, lyrical, and rhythmic ideas will be studied. In addition, students will learn strategies for promoting their songs in the contemporary music marketplace as well as basic concepts of intellectual property right protection. CSU

**MUSIC-190  Topics in Music**  
.5-3 units  SC  
*May be repeated three times*  
Variable hours  
Supplementary topics to the music curriculum, designed to provide a study of current concepts and problems in music. Specific topics will be announced. Transfer credit: UC credit limitations. See counselor. CSU

**MUSIC-222  Theory and Musicianship III**  
5 units  SC  
108 hours lecture per term  
*Recommended: MUSIC 123 or equivalent*  
This course is a study of harmonic techniques used in the Western Common Practice and addresses diatonic sequences, modulatory techniques, and basic chromatic harmony, four-part voice leading, large musical structures, composition, harmonic and structural analysis, and musicianship skills including sight singing, rhythmic training, ear training, dictation, and keyboard realization. CSU, UC

**MUSIC-223  Theory and Musicianship IV**  
5 units  SC  
108 hours lecture per term  
*Recommended: MUSIC 222 or equivalent*  
This course is a study of advanced chromatic harmony, 20th century harmonic practices, large musical structures, style composition, harmonic, structural, and stylistic analysis, and musicianship skills including sight singing, rhythmic training, ear training, dictation, and keyboard realization. CSU, UC

**MUSIC-250  Intermediate Piano**  
1 unit  SC  
54 hours laboratory per term  
*Recommended: MUSIC 151 or equivalent*  
Instruction in moderately difficult piano music with emphasis on methods of preparation. CSU, UC

**MUSIC-252  Piano Ensemble**  
1 unit  SC  
*May be repeated three times*  
54 hours laboratory per term  
*Recommended: audition required*  
Study and performance of chamber music with emphasis on music for four hands. CSU, UC

**MUSIC-255  Advanced Piano**  
1 unit  SC  
54 hours laboratory per term  
*Recommended: MUSIC 250 or audition required*  
Study and performance of keyboard works by important composers of the 18th, 19th and 20th centuries selected according to individual student’s needs. CSU, UC

**MUSIC-256  Teaching and Performance Practice for Music Teachers and Musicians**  
1 unit  SC  
*May be repeated three times*  
54 hours laboratory per term  
This class is designed to assist teachers of keyboard music, students, and performing musicians interested in pedagogy. It will (through performance, discussion and demonstration), explore various ways to augment, develop, and review methods of teaching and performance. CSU

**MUSIC-260  Organ Techniques and Materials I**  
1 unit  SC  
54 hours laboratory per term  
*Recommended: MUSIC 158 or equivalent*  
This course is a continued study of classical organ performance practices and literature. The articulate style of performance, fingering, pedal techniques, and the phrasing and registration practices for organ literature from early periods to 1800 are taught, along with the history and design of the pipe organ, and genres in organ literature. Students will analyze and perform organ masterworks from the Baroque period and will acquire increased coordination skills in manual and pedal playing. CSU, UC

**MUSIC-261  Organ Techniques and Materials II**  
1 unit  SC  
54 hours laboratory per term  
*Recommended: MUSIC 260 or equivalent*  
This course is a continued study of classical organ performance practices and literature. Topics include modern organ schools of technique, advanced technical studies, national styles of pipe organ design, and critical analysis of compositional styles and performance practices pertaining to classical organ literature from the 19th century through the present time. Techniques for adapting accompaniment scores to the organ are also addressed. CSU, UC

**MUSIC-298  Independent Study**  
.5-3 units  SC  
*May be repeated three times*  
Variable hours  
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered. Selected students may pursue special studies in music under the guidance of the music faculty. Transfer credit: UC credit limitations. See counselor. CSU
Music literature – MUSLT

Applied and Fine Arts Division
Dean of Applied and Fine Arts
Humanities Building 112 and 113
925-685-1230 x 2312

MUSLT-110 Sounds of Music: Introduction to Music Literature
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course is an introduction to the experience of listening to music intelligently, with an awareness of rhythm, melody, harmony, timbre and form, as well as with historical perspective. Audio recordings, audio-video recordings, and live performances are used to study the evolution of Western classical styles and genres such as opera, symphony, concerto, and chamber music, as well as jazz and rock. Some comparison of Western musical traditions with those of other cultures will be included. CAN MUS 10, CSU, UC

MUSLT-111 History of Music in Western Culture
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
A study of music and musicians according to the historical periods of Gothic, Renaissance, Baroque, classic, romantic, and contemporary; guided listening utilizing recordings, tapes, films, and some live performances. Some comparison of the music of various cultures. CAN MUS 8, CSU, UC

MUSLT-112 America’s Music – A Multicultural Perspective
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course is based upon the construct of music as and in culture. Students will explore, evaluate, compare, and contrast the diverse musics and traditions of America, including the cultural contributions and influences of major ethnic groups. The course will serve as an introduction to the field of ethnomusicology, a combination of musicology and anthropology and other disciplines, including religion, sociology, gender studies, philosophy, literature, and the arts. Students will examine the historical as well as the religious, philosophical and social conditions in which musics develop and how music relates to cultural continuity and / or change. Music cultures to be considered include: North American Native, African-American, Tex-Mex, Cajun, Asian and Middle Eastern, Hip-Hop, GLBT, gender-specific, and European-American. Influential music cultures of South America, Central America, Mexico, the Caribbean, and others will also be discussed. CSU, UC

MUSLT-113 Introduction and History of Jazz and Rock Music
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course covers the introduction and history of jazz and rock music from traditional, ragtime, boogie-woogie, swing, bebop, and cool, to various contemporary jazz, rock and fusion art forms. It includes a study of the forces that have shaped the art from European, African, Latin, and African-American. The class explores the contributions and conflicts of African-Americans throughout the history and development of this American music. CSU, UC

MUSLT-114 Music Cultures of the World
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course provides a survey of selected music cultures of the world. Students will explore, evaluate, compare and contrast the diverse musics and traditions of the world. The cultural contributions and influences of major ethnic groups, such as those found in North and South America, Asia, the Middle East, Africa, Oceania, and Europe, will be emphasized, as well as the effect various music cultures have had on the United States. Historical, cultural, philosophical and social conditions in which music exist, music's relationship to cultural continuity and / or change, religious, philosophical, social, and artistic conditions, in which musics and cultures develop, and various ways music cultures perceive themselves and others, will be explored through three primary lenses - sound, concept, and behavior. This course serves as an introduction to the field of ethnomusicology, which combines musicology with anthropology and other disciplines, including religion, sociology, gender studies, philosophy, literature, and the arts. A primary goal of the course is to encourage the students' development of a global and multi-cultural-consciousness. CSU, UC

MUSLT-115 Introduction to Music Cultures of the Middle East and North Africa
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course provides a survey of Middle Eastern, North African and Diaspora music cultures. Students will study both rural and urban musical traditions, and how music making relates to religion, political, ethnic and national identity, popular culture, gender relations, and globalization. Historical, cultural, philosophical and social conditions in which music exists will be explored. Current global issues and events will be explored through evaluating the ways in which syncretic or hybrid musical forms emerge when Middle Eastern, Western and other musical and cultural elements blend or conflict. CSU, UC
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>SC</th>
<th>Lecture Hours per Term</th>
<th>Recommended:</th>
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<tbody>
<tr>
<td>MUSLT-116</td>
<td>Introduction to Native American Musics and Cultures</td>
<td>3</td>
<td>SC</td>
<td>54</td>
<td>eligibility for ENGL 122 or equivalent</td>
</tr>
<tr>
<td>MUSLT-117</td>
<td>History of Rock and Roll</td>
<td>3</td>
<td>SC</td>
<td>54</td>
<td>eligibility for ENGL 122 or equivalent</td>
</tr>
<tr>
<td>MUSLT-118</td>
<td>History of Jazz</td>
<td>3</td>
<td>SC</td>
<td>54</td>
<td>eligibility for ENGL 122 or equivalent</td>
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<tr>
<td>MUSPF-107</td>
<td>Rhythm and Blues Performance</td>
<td>.5</td>
<td>SC</td>
<td>27</td>
<td>May be repeated three times</td>
</tr>
<tr>
<td>MUSPF-130</td>
<td>Jazz Workshop</td>
<td>1</td>
<td>SC</td>
<td>54</td>
<td>May be repeated once</td>
</tr>
<tr>
<td>MUSPF-134</td>
<td>Musical Theater Workshop</td>
<td>1</td>
<td>SC</td>
<td>54</td>
<td>May be repeated three times</td>
</tr>
<tr>
<td>MUSPF-135</td>
<td>Vocal Jazz Ensemble</td>
<td>1</td>
<td>SC</td>
<td>54</td>
<td>May be repeated three times</td>
</tr>
<tr>
<td>MUSPF-136</td>
<td>Jazz Ensemble</td>
<td>1</td>
<td>LR</td>
<td>54</td>
<td>May be repeated once</td>
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</tbody>
</table>

### MUSPF-107 Rhythm and Blues Performance
- **3 units** SC
- **54 hours lecture per term**
- **Recommended:** eligibility for ENGL 122 or equivalent

This course provides a survey of the numerous musical traditions, contributions and influences of native peoples found in culture regions in North, Central, and South America. Students will explore various culture-specific and pan-Indian traditions involving music and how these have been affected by colonization, historical and present-day social and political conditions. Current global issues and events will be explored through evaluating the ways in which syncretic or hybrid musical forms emerge when Native American, Western and other musical and cultural elements blend or conflict. Music will be evaluated as both a symbol of identification and a tool of resistance in the process of cultural continuity and change. Perspectives will be drawn from ethnomusicology, anthropology, sociology, the humanities, and multimedia - film / documentary, internet sources, and numerous listening examples. CSU, UC

### MUSPF-130 Jazz Workshop
- **1 unit** SC
- **54 hours laboratory per term**
- **Recommended:** ability to perform on a standard jazz ensemble instrument: saxophone, trombone, trumpet, piano, guitar, bass, drums

This is a workshop band that rehearses and performs a variety of jazz literature. The class develops the ability to perform big band jazz: phrasing, interpretation, dynamics, intonation, etc. The band performs at a variety of concerts and jazz festivals. CSU, UC

### MUSPF-134 Musical Theater Workshop
- **1 unit** SC
- **54 hours laboratory per term**
- **Prerequisite:** ability to perform on an instrument or sing as a soloist or a member of the chorus. Audition required.

This course provides training and experience for instrumentalists and vocalists in the production and presentation of a musical or an opera, with specific emphasis on American musical theater. CSU, UC

### MUSPF-135 Vocal Jazz Ensemble
- **1 unit** SC
- **54 hours laboratory per term**
- **Recommended:** ability to sing a musical line

A jazz vocal ensemble performance workshop designed to include experiences in live reinforced sound and studio recording. The group will perform at specified on-and-off campus festivals and concerts in the DVC recording studio. CSU, UC

### MUSPF-136 Jazz Ensemble
- **1 unit** LR
- **54 hours laboratory per term**
- **Recommended:** ability to perform on a standard jazz ensemble instrument

This is a performance organization that rehearses and performs a variety of contemporary jazz literature. The class develops ability to play various jazz styles, sight read and improvise, develops ability to play both as a member of a section and as a soloist. The band plays various concerts and festivals. CSU, UC
**Music performance**

**MUSPF-137 Jazz Combos**
1 unit  SC  
*May be repeated once*
54 hours laboratory per term
**Prerequisite:** audition or equivalent
This is a course made up of small jazz combos that rehearse and perform a variety of jazz styles. The course develops the ability to improvise, sight read, and perform in a variety of small group settings. The combos will perform at various concerts and festivals. This course is for students with intermediate to advanced ability on an instrument or voice with improvisational experience. CSU, UC

**MUSPF-140 Wind Ensemble**
1 unit  LR  
*May be repeated three times*
54 hours laboratory per term
**Recommended:** ability to play a woodwind, brass, or percussion instrument
Study and performance of wind ensemble literature. An opportunity for the student to become a better musician and performer through participation in rehearsals and group performance. CSU, UC

**MUSPF-141 Honor Band**
.5-1 unit  LR  
*May be repeated three times*
Variable hours
**Recommended:** ability to prepare and submit a performance tape for audition as well as study and performance at a professional level of musical competency.
An intense study, rehearsal, and performance class for the advanced instrumental student. CSU, UC

**MUSPF-142 Applied Woodwind Ensemble**
.5-1 unit  SC  
*May be repeated three times*
Variable hours
**Recommended:** ability to perform on a woodwind instrument
Study and rehearsal of chamber music and solo literature appropriate for woodwind instruments. The ensemble performs at designated functions both on and off campus. CSU, UC

**MUSPF-144 Applied Brass Ensemble**
.5-1 unit  SC  
*May be repeated three times*
Variable hours
**Recommended:** audition required and ability to perform on a brass instrument
Study and rehearsal of chamber music literature appropriate for brass instruments. The ensemble performs at designated functions both on and off campus. CSU, UC

**MUSPF-146 Orchestra**
1 unit  SC  
*May be repeated three times*
54 hours laboratory per term
**Recommended:** ability to perform on an orchestral stringed instrument
The study and performance of orchestral music from 1600 to the present, including the various contemporary music idioms. Each term new works are studied. CSU, UC

**MUSPF-147 Baroque Chamber Orchestra**
1 unit  SC  
*May be repeated three times*
54 hours laboratory per term
**Recommended:** equivalent of two terms of classwork or private study in strings
Class instruction in the baroque style and playing techniques. Students will perform and work on one or more instruments. CSU, UC

**MUSPF-162 A Cappella Choir**
1 unit  SC  
*May be repeated three times*
54 hours laboratory per term
**Recommended:** audition required
Study and performance of standard choral literature for mixed voices. New musical literature is studied each term. CSU, UC

**MUSPF-166 Chamber Singers**
1 unit  SC  
*May be repeated three times*
54 hours lecture per term
**Prerequisite:** audition
This course is for the study and performance of ancient through modern chamber choir literature. CSU, UC

**MUSPF-168 Applied Percussion Ensembles**
1 unit  SC  
*May be repeated three times*
54 hours laboratory per term
**Recommended:** ability to perform on a percussion instrument
Study and rehearsal of music literature for percussion instruments. CSU, UC

**MUSPF-176 Applied String Ensemble**
1 unit  SC  
*May be repeated three times*
54 hours laboratory per term
**Recommended:** ability to perform on a string instrument
Study and rehearsal of chamber music literature appropriate for stringed instruments. The ensemble performs at designated functions both on and off campus. CSU, UC

**MUSPF-177 Contemporary Instrumental Ensemble**
1 unit  SC  
*May be repeated three times*
54 hours laboratory per term
**Recommended:** ability to perform on an ensemble instrument or the equivalent of two terms of classwork or private study of strings
Class instruction in contemporary instrumental reading and playing techniques. Students may perform on more than one instrument. CSU, UC
MUSPF-180  Diablo Valley Masterworks Chorale
1 unit  SC
May be repeated three times
54 hours laboratory per term
Recommended: audition required
Study and performance of the major choral literature often with orchestra. New literature is studied each term. CSU, UC

MUSPF-236  Advanced Jazz Performance
1 unit  LR
May be repeated once
54 hours laboratory per term
Recommended: advanced mastery of instrument(s) commonly used in a large jazz ensemble; ability to read and interpret music in the appropriate jazz styles, traditional and contemporary
A study and performance class for the advanced jazz musician. Class stresses development of solo/ensemble performance and contemporary stylistic literature. CSU, UC

MUSPF-240  Symphonic Band
1 unit  LR
May be repeated three times
54 hours laboratory per term
Recommended: ability to perform on a woodwind, brass, or percussion instrument
A study and performance class for the advanced musician. Class stresses development of solo/ensemble performance and contemporary stylistic literature. CSU, UC

MUSPF-290  DVC Philharmonic Orchestra
1 unit  SC
May be repeated three times
54 hours lecture per term
Prerequisite: audition required
Note: the number of players per instrumental section is determined by instrumentation of the literature being studied and/or by standard orchestral proportions. Students not admitted to the orchestra will be directed to other music performance classes.
This course is for the study, rehearsal, and public performance of the standard Western classical orchestral literature along with new orchestral compositions. New literature will be studied each semester. CSU, UC

Nutrition – NUTRI

Diablo Valley College is approved by the California Board of Registered Nurses for continuing education credits (Provider #CEP 7992). Nutrition courses which can be used are NUTRI 115 and 160.

Biological and Health Sciences Division
Dean of Biological and Health Sciences
Science Center 102
925-685-1230 x 2442

Possible career opportunities
Courses offered within the nutrition discipline prepare students for numerous career paths. These courses begin to prepare the student for careers in food science, dietetics, nursing, dental hygiene, restaurant management, and sports nutrition as well as many other food related or health related professions. Specific courses also meet the requirements for certain certificate programs and majors offered at DVC and other colleges.

NUTRI-112  Weight Management
2 units  SC
36 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course includes the principles of nutrition and behavioral self-management techniques as related to weight loss, weight maintenance and health status. Topics will include nutrient utilization, assessment of nutritional status, energy balance, weight standards, obesity as a public health issue, analysis of weight loss diets, supplements and programs, eating disorders, diet planning and diet analysis. CSU

NUTRI-115  Nutrition and Health: Personal Applications
3 units  SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course is an introduction to nutrition designed for a variety of majors. The focus of this course is the application of basic nutrition concepts to personal life skills. The interface of culture, socioeconomic conditions and personal behaviors with nutritional health will be examined. Practical application of the course content includes, but is not limited to, personal nutrition assessments and diet planning. CSU, UC (credit limits may apply to UC – see counselor)

NUTRI-120  Sports Nutrition: Fueling the Athlete
3 units  SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course includes the integration of the principles of nutrition and physical exercise in order to optimize physical fitness and athletic performance. Topics will include nutritional needs of the athlete, diet planning to optimize physical performance, diet analysis, energy systems and metabolism, efficiency of nutritional ergogenics, dietary supplements, sports drinks, the role of protein, carbohydrates, fats, vitamins, minerals and water in physical performance, body composition, weight gain, weight loss and weight maintenance, eating disorders, and the specific nutritional needs for different types of athletes and sports events. CSU
NUTRI-150  Topics in Nutrition
.5-3 units  SC
May be repeated three times
Variable hours
This course will supplement topics in the nutritional sciences, dietetics, food service and food technology. Specific topics will be announced. CSU, UC (credit limits may apply to UC – see counselor)

NUTRI-160  Nutrition: Science and Applications
3 units  SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
This course covers the basic principles of the science of nutrition including a survey of the nutrients in food and their actions in health promotion and disease prevention. Diet planning principles and guidelines, nutrient recommendations and assessment throughout the human life cycle are covered. Course content is appropriate for majors in dental hygiene. CSU, UC (credit limits may apply to UC – see counselor)

NUTRI-298  Independent Study
.5-3 units  SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offerings.
An opportunity for advanced students to study special interests under the direction of the faculty. CSU, UC (credit limits may apply to UC – see counselor)

Oceanography – OCEAN
Biological and Health Sciences Division
Dean of Biological and Health Sciences
Science Center 102
925-685-1230 x 2442

Possible career opportunities
The diverse range of subjects examined and the multi-disciplinary approach taken within the oceanography program prepares students for a variety of career paths. Courses focus on biological, physical, geological and chemical aspects of oceanography. Many oceanographers are employed as researchers and/or educators by public and private research institutions, universities, and colleges. Students graduating with degrees in oceanography or aquatic science fields may work as laboratory or field technicians; water monitoring specialists; for environmental protection, consulting and nonprofit firms; as observers aboard fishing vessels; or in the natural resource management fields. Limited numbers are employed to work with marine animals at aquariums, theme parks, or research facilities. Most career options are likely to require more than two years of college study.

OCEAN-101  Fundamentals of Oceanography
3 units  SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
Note: this course does not include a laboratory. Students requiring or wanting a laboratory to accompany this course should enroll in OCEAN 110
Note: formerly OCEAN-109
This course is an introduction to the geological, chemical, physical and biological aspects of the world's oceans and the interactions between these different aspects. Lecture topics will include (but are not limited to): The history of oceanography; historic and modern oceanographic instruments, methods of sampling and analysis; plate tectonics and marine geology; historic and modern uses of charts and navigational techniques; the marine-land interface; ecological problems of the local bay, estuary, delta and state wide water resources; oceans' roles as a dominant influence on the earth, its climate, and the lives of its inhabitants; food, drug, and mineral energy resources from the sea; global and local ocean resource management, aqua cultural techniques and practices, and preservation of marine environments; and the deep sea properties, animals and adaptations. The subject is multi-disciplinary both in regard to the variety of aspects studied and the methods of study utilized. CSU, UC

OCEAN-110  Fundamentals of Oceanography Laboratory
1 unit  SC
54 hours laboratory per term
Recommended: eligibility for ENGL 122
Students will experience the role of oceanographer, including the opportunity to lead students through a training cruise. In preparation, students will collect marine organisms and water samples from local waters, identify and process marine life, and test water samples for salinity and nutrients. Navigation skills are learned using the nautical chart, sextant, parallel rules, dividers, computer and GPS (Global Positioning System). After a shakedown cruise to learn deck equipment and boat procedures, students will analyze water samples, identify and count organisms, assemble data, prepare a detailed report, and prepare marine organisms for permanent storage and research. CSU, UC

OCEAN-111  Field Studies in Oceanography
1-4 units  LR
May be repeated three times
Variable hours
Recommended: eligibility for ENGL 122 or equivalent
Note: this course can only be repeated if the student participates in a different activity as evaluated by the instructor.
Students can advance or reinforce their knowledge of oceanography by participating in one or more of the following activities: Tutoring, laboratory assisting, working on a research vessel, serving in community marine science activities, participating in field trips, attending conferences, developing teaching aids and demonstrations, participating in research projects, serving as a volunteer in a marine science related organization. CSU
OCEAN-150  Topics in Oceanography
0.3-4 units SC
May be repeated three times
Variable hours
Note: formerly OCEAN 120
A supplemental course in oceanography to provide a study of current concepts and problems in oceanography and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

OCEAN-298  Independent Study
1-3 units SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department chair / division dean and the vice president of academic affairs; topics must extend study beyond courses offered
With permission of advising instructor, selected students will pursue an independent, creative and analytical study of an oceanographic topic. Students may apply for either 1, 2, or 3 units. CSU, UC (credit limits may apply to UC – see counselor)

PERSN-121  Second Term Persian
5 units SC
90 hours lecture / 18 hours laboratory by arrangement per term
Recommended: PERSN 120 or equivalent
This is a second semester sequential course in Persian which includes the understanding, speaking, reading, and writing of the language. A continuation of basic communicative structures and functions are presented, as well as a continued examination of the culture of the Persian-speaking world. The present and past perfect tenses will be introduced and vocabulary and cultural information will be expanded. CSU, UC

PERSN-150  Topics in Persian
0.3-4 units SC
May be repeated three times
Variable hours
A supplemental course in Persian to provide a study of current concepts and problems in Persian and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

Persian – PERSN
Students with prior foreign language instruction should check with a language teacher regarding their proper placement in foreign language courses. The following system is generally used to determine the appropriate term of college work based on high school language: two years equal one college term; three years equal two college terms; four years equal three college terms.

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Humanities Building 112 and 113
925-685-1230 x 2312

Possible career opportunities
The study of Persian can open up opportunities in communications, foreign trade and banking, transportation, government, the Foreign Service, tourism, library services, teaching, professional translating, journalism, and all levels of education, including university teaching. Most foreign language careers require more than two years of study.

PERSN-120  First Term Persian
5 units SC
90 hours lecture / 18 hours laboratory by arrangement per term
This is a basic beginning course in understanding, speaking, reading, and writing Persian. It offers a balanced approach to the language and culture. Basic communicative functions and structures are introduced, as well as a basic exploration of the culture, history and geography of the Persian-speaking world. CSU, UC

PERSN-155  First Term Conversational Persian
3 units SC
May be repeated once
54 hours lecture per term
This is an introductory course in basic Persian conversation utilizing practical material with oral-aural practice based on this material. Calligraphy is included in the course. CSU

PERSN-156  Second Term Conversational Persian
3 units SC
May be repeated once
54 hours lecture per term
Recommended: PERSN 155 or equivalent
This course is a continuation of PERSN 155. Basic skills are expanded to include more complex conversational skills. Study of calligraphy is expanded. CSU

PERSN-157  Third Term Conversational Persian
3 units SC
May be repeated once
54 hours lecture per term
Recommended: PERSN 156 or equivalent
This course is a continuation of PERSN 156. Complex conversational skills are perfected, along with basic grammatical principles. Calligraphy is practiced as an art form beyond its usage as a form of writing. CSU

Philosophy – PHILO
Applied and Fine Arts Division
Dean of Applied and Fine Arts
Humanities Building 112 and 113
925-685-1230 x 2312
Possible career opportunities
For those who wish for a career in philosophy, teaching and research at the university level is an attractive option. There is also an emerging demand for experts in applied ethics, especially in the areas of medical, business, and environmental ethics. Most career options will require an advanced degree.

PHILO-120 Introduction to Philosophy
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course carefully and critically examines the most basic of human beliefs. Logic, epistemology, metaphysics, value theory (ethics and aesthetics), and philosophy of religion are explored at an introductory level. The vocabulary of philosophy and techniques of inquiry are included. CAN PHIL 2, CSU, UC

PHILO-122 Introduction to Ethics
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course is a systematic examination of major ethical theories, the nature of moral reasoning, as well as the evaluation of contemporary moral issues such as abortion, euthanasia, and capital punishment. CAN PHIL 4, CSU, UC

PHILO-130 Critical Thinking: Reasoning in Everyday Life
3 units SC
54 hours lecture per term
Prerequisite: ENGL 122 or equivalent
This course introduces students to the principles of inductive and deductive inference and their practical applications in everyday situations such as problem solving and evaluation of arguments. The course examines the uses of language, formal and informal fallacies, syllogistic argument forms and scientific method. This course also develops the ability to integrate the principles of critical thinking with the techniques of effective written argument. CAN PHIL 6, CSU, UC

PHILO-140 Introduction to Judeo-Christian Tradition
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course is a critical examination of history, theology, literature, and traditions of Judaism and Christianity. CSU, UC (credit limits may apply to UC – see counselor)

PHILO-141 Introduction to the Philosophy of Religion
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course is a general introduction to the nature of religion. Students will analyze central themes (such as revelation, faith and miracles) and issues (such as the problem of evil, and the relationship between religion and science). CSU, UC

PHILO-150 Topics in Philosophy
.3-.4 units SC
Variable hours
A supplemental course in philosophy to provide a study of current concepts and problems in philosophy and related subdivisions. Specific topics will be announced in the schedule of courses. CSU, UC (credit limits may apply to UC – see counselor)

PHILO-220 Comparative Religion
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
The religious thought, experience, and ethical teachings of living religions of the world are examined, discussed and compared. Religions which may be discussed, include Hinduism, Buddhism, Jainism, Sikhism, Zoroastrianism, Judaism, Christianity, and Islam. CSU, UC

PHILO-221 Contemporary Religious Movements
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course is an examination and study of thriving contemporary religious movements through background study, speakers from various movements, and visitations of services of these religious groups. CSU, UC

PHILO-224 History of Western Philosophy; Pre-Socrates to Medieval Period
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course examines the philosophy of the pre-Socratics, Plato, and Aristotle, and of the Hellenistic and Medieval periods. CAN PHIL 8, PHILO 224 + 225 = CAN PHIL SEQ A, CSU, UC

PHILO-225 History of Western Philosophy: Descartes to Present
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course examines continental rationalism (Descartes, Spinoza, and Leibniz), British empiricism (Locke, Berkeley, and Hume), Kant, 19th century and 20th century philosophy. PHILO 224+225 = CAN PHIL SEQ A, CSU, UC

PHILO-298 Independent Study
.5-.3 units SC
May be repeated three times
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend beyond courses offered.
Recommended: eligibility for ENGL 122 or equivalent
Variable hours
This course provides an opportunity for students to study special interests under direction of philosophy faculty. CSU, UC (credit limits may apply to UC – see counselor)

Photography
See Art-Art

Applied and Fine Arts Division
Dean of Applied and Fine Arts
Humanities Building 112 and 113
925-685-1230 x 2312

Possible career opportunities
A photography career offers exciting job prospects as a photo-journalist, archivist, photo engraver, photographic crafts-person, photographic laboratory technician, illustrator, and commercial photographer (weddings, portraits, industrial, fashion, and architecture.)

Physical education – PE

Activity courses - .5 - 2 units each, 18-108 hours of activity per term each, SC
Note: - R-OK - May be repeated 3 times, beginning, intermediate, or advanced classes of the same activity may only be repeated a maximum of 3 times altogether. In the following activity the following activity courses, recreational and physical education skills are developed and attention is given to appropriate rules and techniques. This applies to all courses numbered 80 to 199.

PE-098 Sports Skills and Techniques
.5 - 2 units SC
May be repeated three times
Not degree applicable
Variable hours
An activity course designed for students to increase their knowledge, skills, and techniques for a specific sport.

PE-099 Advanced Athletic Training
.5 - 2 units SC
May be repeated three times
Not degree applicable
Variable hours
An activity course designed for students to increase their physical conditioning and skill level for a specific sport.

PE-100 Aquatic Fitness
.5 - 2 units SC
May be repeated three times
Variable hours
Recommended: PE 106 or equivalent.
This course will enable the student to reach a high level of cardiovascular fitness through the use of all four competitive swim strokes (Freestyle, Butterfly, Backstroke and Breast stroke). Strokes will be performed in an aerobic style workout. The four competitive strokes will be reviewed throughout the course. CSU, UC (credit limits may apply to UC – see counselor)

PE-102 Lifeguard Training
.5 - 2 units SC
May be repeated once
Variable hours
Recommended: PE 106 or ability to swim 500 yards continuously and to demonstrate the freestyle, backstroke, and breaststroke
This course is designed to provide the student with advanced swimming ability the opportunity to acquire the knowledge, understanding, skills and techniques included in the Red Cross Advanced Lifesaving course. It aims for the development of ability to recognize and avoid hazardous water conditions and practices, development of ability to use self-rescue skills and development of skill in rescuing and/or assisting persons in danger of drowning. Also included are various standard First Aid skills. CSU, UC (credit limits may apply to UC – see counselor)

PE-104 Springboard Diving
.5 - 2 units SC
May be repeated three times
Variable hours
This course will offer instruction and training in one and three meter springboard diving techniques, rules, history, safety, and judging. CSU, UC (credit limits may apply to UC – see counselor)

PE-105 Water Aerobics
.5 - 2 units SC
May be repeated three times
Variable hours
This course is designed to improve muscle tone and cardiovascular fitness. A variation of movement and tempo in the water exercise routine will utilize water resistance and buoyancy. Strength, flexibility and conditioning exercises will be integrated with aerobic movement to develop maximum benefits. CSU, UC (credit limits may apply to UC – see counselor)
PE-106  Swimming
  .5-2 units  SC
  May be repeated three times
  Variable hours
This course is designed to teach the fundamental skills of swimming. Emphasis will be on proper swimming techniques for the four competitive swimming strokes. Additionally, time will be spent on swimming strength development and personal swimming safety. CSU, UC (credit limits may apply to UC – see counselor)

PE-107  Stretch and Yoga for Sports
  .5-2 units  SC
  May be repeated three times
  Variable hours
A course introducing principles of stretch technique, yoga asanas and imagery/relaxation techniques with relationship to a particular sport or activity. Emphasis on general warm-up, flexibility and strengthening exercises and injury prevention. Preliminary flexibility and alignment measurement techniques are also examined. CSU, UC (credit limits may apply to UC – see counselor)

PE-110  Water Polo
  .5-2 units  SC
  May be repeated three times
  Variable hours
Recommended: intermediate or above swimming ability
An activity course covering all aspects of the game of water polo. CSU, UC (credit limits may apply to UC – see counselor)

PE-114  Beginning Hatha Yoga
  .5-2 units  SC
  May be repeated three times
  Variable hours
This course explores the principles of Hatha Yoga to achieve lifetime fitness. It covers yoga postures (asanas) designed to strengthen and tone your body. Breathing exercises, relaxation and meditation techniques will be demonstrated throughout the course. CSU, UC (credit limits may apply to UC – see counselor)

PE-115  Body Sculpt
  .5-2 units  SC
  May be repeated three times
  Variable hours
Guided strength training exercises performed to a specific music cadence and designed for noticeable improvement in muscular strength, tone, muscular endurance and flexibility. Fitness assessments performed and sports nutritional topics discussed. CSU, UC (credit limits may apply to UC – see counselor)

PE-116  Step Aerobics
  .5-2 units  SC
  May be repeated three times
  Variable hours
This class is an aerobic cardiorespiratory fitness class which utilizes a variety of choreographed and non-choreographed movement patterns. Proper stepping techniques, coinciding and non-coinciding arm and leg patterns, floor exercises and mat work, light hand weights, stretching, abdominals, and lecture will be incorporated. CSU, UC (credit limits may apply to UC – see counselor)

PE-117  Fitness Jogging
  .5-2 units  SC
  May be repeated three times
  Variable hours
This is an activity course in fitness through warm-up, stretching, jogging, and recovery. Topics to be explored include history, equipment, safety, assessing cardiovascular effects, techniques, and values of jogging. CSU, UC (credit limits may apply to UC – see counselor)

PE-118  Triathlon Training
  .5-2 units  SC
  May be repeated three times
  Variable hours
This course will offer the student the opportunity to cross-train in triathlon skills (swimming, biking, and running) and learn training methods to accomplish a high level of fitness by triathlon training. The history, lore, equipment, safety and rules of triathlon along with the strategies will be explored. CSU, UC (credit limits may apply to UC – see counselor)

PE-119  Fitness Walking
  .5-2 units  SC
  May be repeated three times
  Variable hours
Note: reasonable health awareness of personal limitations (if any), and ability to modify participation appropriately.
Intended for students who would like to utilize walking as a fitness enhancing activity. Walking routes begin on campus and explore a multitude of nearby parks and trails. Topics include: fitness and health assessment; equipment and safety; walking techniques; motivation; nutrition basics; program design and evaluation; volkssporting and more. CSU, UC (credit limits may apply to UC – see counselor)

PE-120  Physical Fitness
  .5-2 units  SC
  May be repeated three times
  Variable hours
This course is designed to improve physical fitness through participation in floor exercise, flexibility routines, strength training, and low impact aerobics. The benefits of physical fitness issues will be included. CSU, UC (credit limits may apply to UC – see counselor)

PE-121  Aerobics
  .5-2 units  SC
  May be repeated three times
  Variable hours
This course is designed to improve cardiovascular fitness, flexibility, strength and agility of movement. Aerobic music with an emphasis on routines that are continuous and cardiovascular will be used. CSU, UC (credit limits may apply to UC – see counselor)
PE-123  Weight Training for Women
.5-2 units  SC
May be repeated once
Variable hours
   Note:  this course is open to all students
Provides a basic knowledge of weight training principles and
techniques and an opportunity to apply this knowledge to a
personalized training program for women. Health issues important
to women will be discussed as they relate to weight training.
CSU, UC (credit limits may apply to UC – see counselor)

PE-124  Weight Training
.5-2 units  SC
May be repeated once
Variable hours
This class covers the techniques and training schedules of
resistive strength training of all body parts. CSU, UC (credit lim-
its may apply to UC – see counselor)

PE-125  Power Lifting/Training
.5-2 units  SC
May be repeated three times
Variable hours
This course is designed to teach the basic elements of the sport
of power lifting as well as to provide a guide for power training.
CSU, UC (credit limits may apply to UC – see counselor)

PE-126  Super Circuit
.5-2 units  SC
May be repeated three times
Variable hours
Super Circuit is a combination of aerobics and weight train-
ing designed to promote cardiovascular fitness and improve
strength, muscular endurance, and flexibility. Individual health
and fitness assessments will be conducted during the semester.
Nutritional awareness and wellness techniques will be included.
CSU, UC (credit limits may apply to UC – see counselor)

PE-127  Hips, Thighs and Abs
.5-2 units  SC
May be repeated three times
Variable hours
Toning and strengthening exercises which emphasize hip, thigh,
and ab (abdominal) areas. Range of motion at all joints will
increase as a result of flexibility movements. General muscle
tone and knowledge of anatomy will be included. Various
aerobic techniques and props will be utilized including, but not
limited to, therabands, xercuffs, mat work, and movements that
Joe Pilates originated. CSU, UC (credit limits may apply to UC
– see counselor)

PE-128  Cardio Kickboxing
.5-2 units  SC
May be repeated three times
Variable hours
   Recommended:  ability to participate in vigorous activity.
This course will combine skills and techniques from boxing, self
defense and various forms of martial arts, such as, Karate and
Muay Tai to promote a fun, yet effective and challenging aero-
bic workout. Jump rope and running will be primary cardiovas-
cular activities. Flexibility, strength training, focus mitt training
and muscular endurance activities may also be incorporated.
CSU, UC (credit limits may apply to UC – see counselor)

PE-129  Cycling / Spinning Training
.5-2 units  SC
May be repeated three times
Variable hours
This is an activity course in fitness through stationary group
cycling training, strength training, stretching, warm-up, and
recovery. This program uses heart rate monitoring to assess the
cardiovascular training affects. History, lore, safety, skill, tech-
nique, value and joy of cycling will be explored. CSU, UC (credit
limits may apply to UC – see counselor)

PE-130  Hiking
.5-2 units  SC
May be repeated three times
Variable hours
   Note:  to be ready for the required first day on-campus orient-
tation, you should pick up a “Pre-course Information” sheet
from the PE. division office.
Learn about hiking and safety skills as you enjoy hiking the
beautiful parks and open space of the Bay Area. Hiking sites
vary, routes are from 4-10 miles long, usually in mountainous
terrain. There are no overnight hiking trips. CSU, UC (credit lim-
its may apply to UC – see counselor)

PE-131  Fitness After Fifty
.5-2 units  SC
May be repeated three times
Variable hours
   Note:  Students are advised to seek permission from their doc-
tor before beginning course.
A variety of fitness-enhancing activities designed for students
over fifty of all fitness levels. Topics will include conditioning
principles, goal-setting, fitness assessments and nutrition guide-
lines. Open to all students. CSU

PE-135  Power Lifting for Women
.5-2 units  SC
May be repeated three times
Variable hours
This course provides a basic knowledge of the sport of women’s
power lifting and focuses on the three power lifts; squat, bench
press and deadlift. Technique will be emphasized and com-
prehensive training programs will be individually developed.
Periodization cycles will be applied to time peak performance.
Health issues important to women will be discussed as they
relate to power lifting. Open to all students. CSU
**PE-144 Spirit Squad**

.5-2 units SC  
*May be repeated three times*  
*Variable hours*

This course will prepare students to explore the techniques and values of a spirit squad. The student will examine, analyze, perform, and evaluate their role in promoting school spirit and student involvement at various campus activities. CSU, UC (credit limits may apply to UC – see counselor)

**PE-150 Physical Education Activities**

.3-4 units SC  
*May be repeated three times*  
*Variable hours*

A supplemental course in physical education to provide a study of current concepts and problems in fitness and related subdivisions. Specific topics will be announced in the schedule of courses. CSU, UC (credit limits may apply to UC – see counselor)

**PE-154 Badminton (Beginning)**

.5-2 units SC  
*May be repeated three times*  
*Variable hours*

This course teaches the fundamental techniques and strategies in a competitive game of badminton. It covers the historical background, conditioning, footwork, stroking techniques, rules, scoring, singles and doubles strategies and tournament play. CSU, UC (credit limits may apply to UC – see counselor)

**PE-158 Bowling**

.5-2 units SC  
*May be repeated three times*  
*Variable hours*

The focus of this course is basic delivery technique, targeting, spare shooting and strategy. Additional topics include equipment, rules, etiquette, terminology and scoring. Students will participate in team competition as well as receiving instruction. CSU, UC (credit limits may apply to UC – see counselor)

**PE-162 Beginning Golf**

.5-2 units SC  
*May be repeated once*  
*Variable hours*

*Note: some class meetings will be held at Buchanan Field Golf Course.*  

An introduction to the game of golf designed to provide the skill and knowledge necessary to successfully transition to playing golf on a course. Equipment selection will be covered as well as full swing fundamentals, ball flight principles, chipping, pitching and putting. CSU, UC (credit limits may apply to UC – see counselor)

**PE-163 Golf, Intermediate/Advanced**

.5-2 units SC  
*May be repeated once*  
*Variable hours*

*Recommended: PE 162 or equivalent*

Intermediate / Advanced level golf skills. Primary participation is through playing nine holes of golf. CSU, UC (credit limits may apply to UC – see counselor)

**PE-172 Tennis**

.5-2 units SC  
*May be repeated three times*  
*Variable hours*

This course offering teaches the student the game of tennis covering conditioning techniques, stroking methods, historical background, rules, scoring, singles and doubles strategies. CSU, UC (credit limits may apply to UC – see counselor)

**PE-173 Distance Track Training**

.5-2 units SC  
*May be repeated three times*  
*Variable hours*

This is an activity course in distance track training. Warm-up, stretching, interval training, and recovery will be covered. Other topics to be explored include history, equipment, safety, assessing cardiovascular effects, techniques, and values of distance running and interval training. CSU, UC (credit limits may apply to UC – see counselor)

**PE-174 Pre-Season Track and Field Training**

.5-2 units SC  
*May be repeated three times*  
*Variable hours*

This course provides for pre-season conditioning for track and field. The student will have the opportunity for analyzing techniques, developing training programs, and acquiring a thorough working knowledge of the rules concerning their events. CSU, UC (credit limits may apply to UC – see counselor)

**PE-178 Advanced Tennis**

.5-2 units SC  
*Variable hours*

*Recommended: prior tennis knowledge and competitive experience.*  

This is an activity course that offers advanced tennis students opportunities to learn and experience complex stroke techniques. In addition, students will utilize advanced singles and doubles tactics and strategy, as well as, high level conditioning exercises. CSU

**PE-180 Baseball**

.5-2 units SC  
*May be repeated three times*  
*Variable hours*

*Recommended: tryout audition*

This course is designed for the student who has previous baseball experience and has aspirations of playing intercollegiately. It covers history, rules, strategies, techniques, and training
aspects of baseball. CSU, UC (credit limits may apply to UC – see counselor)

PE-182 Basketball
 .5-2 units SC
 May be repeated three times
 Variable hours
 Note: students should be physically capable of performing vigorous exercise.
 A basketball course with emphasis on cardiovascular conditioning, techniques, rules and strategies of the full court game. CSU, UC (credit limits may apply to UC – see counselor)

PE-185 Advanced Football Skills
 .5-2 units SC
 May be repeated once
 Variable hours
 Instruction in the necessary position skills and team play in football will be provided. Football rules and scoring methods will be reviewed. CSU, UC (credit limits may apply to UC – see counselor)

PE-186 Flag Football
 .5-2 units SC
 May be repeated three times
 Variable hours
 This course teaches the student the basic skills of football. Rules of the game, team strategy, and methods of scoring will also be covered. CSU, UC (credit limits may apply to UC – see counselor)

PE-187 Analysis of the Multiple Aspects of Modern Day Football
 .5-2 units SC
 May be repeated once
 Variable hours
 Recommended: tryout auditions
 Study and analysis of the contemporary tactical situations and schemes that college football teams are employing today in offense, defense, and the kicking game. CSU, UC (credit limits may apply to UC – see counselor)

PE-188 Beginning Soccer
 .5-2 units SC
 May be repeated once
 Variable hours
 This is a beginning course in soccer. Emphasis is on basic skills and techniques, rules, etiquette, safety, conditioning, and match play. Offensive and defensive positions and basic team strategies are included. CSU, UC (credit limits may apply to UC – see counselor)

PE-190 Softball
 .5-2 units SC
 May be repeated three times
 Variable hours
 This course offers instruction in individual and team skills in softball. Areas covered in class include: Proper techniques of hitting, throwing, and catching; game strategies; and rule knowledge. CSU, UC (credit limits may apply to UC – see counselor)

PE-192 Beginning Volleyball
 .5-2 units SC
 May be repeated once
 Variable hours
 This course is designed to teach the student the beginning skills of volleyball and to incorporate them into successful team play. CSU, UC (credit limits may apply to UC – see counselor)

PE-193 Intermediate/Advanced Volleyball
 .5-2 units SC
 May be repeated once
 Variable hours
 The focus of this course is intermediate/advanced knowledge and skills which will enable a higher level of performance and the utilization of multi-option volleyball strategies. CSU, UC (credit limits may apply to UC – see counselor)

PE-199 Athletic Conditioning for Various Sports
 .5-2 units SC
 May be repeated three times
 Variable hours
 An activity course designed for students to increase their physical conditioning and skill level for a specific sport. CSU, UC (credit limits may apply to UC – see counselor)

PE-298 Independent Study
 .5-3 units SC
 May be repeated three times
 Variable hours
 Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered
 An opportunity for advanced students to study special interests under the direction of the faculty. CSU, UC (credit limits may apply to UC – see counselor)

Physical education adaptive – PEADP

Physical Education, Athletics and Dance Division
Dean of Physical Education, Athletics and Dance
Science Center 102
925-685-1230 x 2442
PEADP-146 Adaptive Individualized Exercise
.5-2 units SC
May be repeated three times
Variable hours
Notes: medical release form signed by physician. College level learning skills and vocabulary.
This course is an adapted physical activity class designed to maintain and/or increase physical capabilities of physically disabled students, as well as to increase their ability, balance, flexibility, strength, muscular endurance, power, speed, hand-and-foot-eye coordination, and cardiopulmonary endurance. Students will learn correct exercise techniques to optimize health benefits. CSU, UC (credit limits may apply to UC – see counselor)

PEADP-148 Adapted Weight Lifting
.5-2 units SC
May be repeated three times
Variable hours
Note: medical release form signed by physician. College level learning skills and vocabulary.
Designed to instruct students who want to increase muscular strength. All exercise programs are designed to meet the student’s individual goals. General strengthening, conditioning, and body mechanics are included. A major purpose is not only to increase strength, but also to learn of one’s own physical capabilities and how to continue improvement or maintenance. CSU, UC (credit limits may apply to UC – see counselor)

PEADP-149 Adaptive Aquatic Fitness
.5-2 units SC
May be repeated three times
Variable hours
Note: medical release form signed by physician. College level learning skills and vocabulary.
This course is designed to include three major components: 1) adaptive and/or remedial swimming instruction; 2) swimming to improve cardiovascular endurance; 3) individually prescribed aquatic exercises. It is designed for adults of all ages and physical abilities. CSU, UC (credit limits may apply to UC – see counselor)

PEADP-151 Aquatic Exercise for the Physically Limited
.5-2 units SC
May be repeated three times
Variable hours
Note: medical release form signed by physician. College level learning skills and vocabulary.
This course is designed for individuals who may benefit from using water as a resistance medium in performing flexibility exercises and/or stress reduction techniques. Helps reduce tension, spasticity, and chronic pain associated with a variety of permanent disabilities while improving circulation and flexibility. CSU, UC (credit limits may apply to UC – see counselor)

PECMB-110 Jujitsu
.5-2 units SC
May be repeated three times
Variable hours
This course will cover the historical perspective, philosophical meaning, and physical and safety aspects of jujitsu. This Japanese system of unarmed combat teaches students to yield to the opponents strength to gain a physical advantage. CSU, UC (credit limits may apply to UC – see counselor)

PECMB-111 Tae Kwon Do
.5-2 units SC
May be repeated three times
Variable hours
Tae Kwon Do is an ancient Korean Martial Art. Students will learn “the way of fist and foot” as well as the philosophy and mental discipline of Tae Kwon Do. CSU, UC (credit limits may apply to UC – see counselor)

PECMB-112 Self-Defense
.5-2 units SC
May be repeated three times
Variable hours
Class will combine defensive techniques and concepts from Jujitsu, Judo, Karate, and Aikido. The student will master intricate moves, and gain strength and flexibility. CSU, UC (credit limits may apply to UC – see counselor)

PECMB-113 Tai Chi Chuan
.5-2 units SC
May be repeated once
Variable hours
A slow moving Chinese martial art used as exercise and self-development. Based on the combined principles of hardness and softness overcoming each other, Tai Chi Chuan practice relieves stress, develops an increased sense of well-being, in addition to improving self-discipline, focus, and balance. The student will master intricate moves, gain strength, increase flexibility, and tone muscles. CSU, UC (credit limits may apply to UC – see counselor)

PECMB-114 Aikido
.5-2 units SC
May be repeated once
Variable hours
A noncompetitive, non-fighting discipline comprising purely defensive techniques and principles of movement. Derived from Japanese warrior arts, this unique method of self-defense neu-
eralizes an attack, redirecting the aggressor's negative energy. Aikido also improves coordination while strengthening mind and body. CSU, UC (credit limits may apply to UC – see counselor)

PECMB-116 Aikido Weapons - Jo and Bokken
 .5-2 units SC
 May be repeated three times
 Variable hours
 This course will explore the historical, philosophical, physical, and safety aspects of aikido weapons - jo (wooden staff) and bokken (wooden sword). CSU, UC (credit limits may apply to UC – see counselor)

PECMB-118 Judo
 .5-2 units SC
 May be repeated three times
 Variable hours
 This course will explore the historical perspective, recreational, and safety aspects of judo. Emphasize self-discipline, punctuality, courtesy, and respect as well as mental and physical training for self-defense. Judo emphasizes throws and pins. CSU, UC (credit limits may apply to UC – see counselor)

PECMB-119 Karate
 .5-2 units SC
 May be repeated three times
 Variable hours
 This course will explore the historical perspective, philosophical meaning, and physical and safety aspects of Kajukembo Karate. Learn the way of the "empty hand" using legs, arms and fists as well as Kiai (a state of mind) which accompany each action. CSU, UC (credit limits may apply to UC – see counselor)

PECMB-123 Intermediate Tai Chi Chuan
 .5-2 units SC
 May be repeated once
 Variable hours
 Recommended: PECMB 113 or equivalent
 This course will be a continuation of Tai Chi Chuan introducing more complicated forms of Tai Chi Chuan. CSU, UC (credit limits may apply to UC – see counselor)

PECMB-124 Intermediate Aikido
 .5-2 units SC
 May be repeated once
 Variable hours
 Recommended: PECMB 114 or equivalent
 This intermediate aikido course will emphasize an increased pace and more intricate maneuvers of aikido. CSU, UC (credit limits may apply to UC – see counselor)

PECMB-150 Topics in Martial Arts and Combatives
 .3-4 units SC
 May be repeated three times
 Variable hours
 A supplemental course is martial arts/combatives to provide a study of current concepts, movements and problems in combat-ives and related subdivisions. Specific topics will be announced in the schedule of courses. CSU, UC (credit limits may apply to UC – see counselor)

Physical education dance – PEDAN

Physical Education, Athletics and Dance Division
Dean of Physical Education, Athletics and Dance
Science Center 102
925-685-1230 x 2442

PEDAN-128 Pilates Mat Work
 .5-2 units SC
 May be repeated three times
 Variable hours
 An introductory and basic mat class using exercises developed by Joseph Pilates focusing on intrinsic muscle groups. The class addresses individual needs, body alignment, core strength development, with emphasis placed on back and abdominal strengthening. CSU, UC (credit limits may apply to UC – see counselor)

PEDAN-129 Introduction to Dance
 .5-2 units SC
 May be repeated three times
 Variable hours
 An introductory course focusing on the development of coordination, rhythm, strength, flexibility, alignment and basic dance movement combinations. Secondary focus on basic musculo-skeletal alignment, movement safety, and dance appreciation skills. CSU, UC

PEDAN-130 Beginning Ballet
 .5-2 units SC
 May be repeated once
 Variable hours
 Note: a student can take PEDAN 130 and/or PEDAN 133 a maximum total of four times.
 An activity course in the basic principles of beginning classical ballet. Each class will consist of a ballet barre, center floor adagio, allegro combinations and ballet dances choreographed for the class. The course also introduces the history of the genre and conceptual principles of ballet as an art form. CSU, UC

PEDAN-131 Rhythmic Analysis for Dancers
 .5-2 units SC
 May be repeated three times
 Variable hours
 Note: previous experience in any dance technique is suggested.
 Exploration of rhythm, meter and measure and other compositional elements (forms and genres) of music in relationship to dance and dancers. Application of musical elements and components to the craft of making dances. CSU, UC
PEDAN-133 Intermediate Ballet
.5-2 units  SC
May be repeated once
Variable hours
An activity course in classical ballet techniques for the intermediate or advanced student. Warm-up at the barre followed by center-floor combinations. CSU, UC

PEDAN-134 Beginning Pointe Ballet
.5-2 units  SC
May be repeated three times
Variable hours
Prerequisite: PEDAN-133 or equivalent
An activity course in classical training through the application of pointe technique. The class will focus on ballet line, musicality, sequences, strength, grace and the specifics of pointe technique. Course examines the historical origins of the pointe shoe/pointe work and further explores the history of ballet and the conceptual principles of ballet as an art form. CSU, UC

PEDAN-136 Beginning Jazz Dance
.5-2 units  SC
May be repeated once
Variable hours
Note: a student can take PEDAN 136 and/or PEDAN 137 a maximum total of four times.
A beginning level activity course designed to increase flexibility, rhythmic coordination and agility through jazz dance movement. The primary focus is jazz dance technique. A secondary focus is the historical perspective of and appreciation for jazz dance as an art form. CSU, UC

PEDAN-137 Intermediate Jazz Dance
.5-2 units  SC
May be repeated once
Variable hours
Fundamental and accelerated jazz technique to develop intermediate skills accompanied by pertinent background information relevant to the dance form. CSU, UC

PEDAN-138 Beginning Tap Dance
.5-2 units  SC
May be repeated once
Variable hours
Note: a student can take PEDAN 138 and/or PEDAN 141 a maximum total of four times.
An activity course in beginning tap dance covering appropriate center and traveling progressions and short tap compositions. A range of skills and techniques including single, double and triple sounds with the feet will be introduced. CSU, UC

PEDAN-140 Dance Choreography
2 units  SC
May be repeated three times
18 hours lecture / 54 hours activity per term
Choreographic skills will be developed through study and practice of dance movement phrasing, spatial design and relationships, rhythm, thematic development, concert, solo and group work. CSU, UC

PEDAN-141 Intermediate Tap Dance
.5-2 units  SC
May be repeated once
Variable hours
Intermediate tap dance is designed for the student who wants to improve basic skills, enhance personal style, and increase skill and knowledge of more advanced tap steps and combinations. Tap dance history styles, including Buck and Wing and Rhythm Tap, and rhythm progressions will be studied. CSU, UC

PEDAN-142 Beginning Modern Dance
.5-2 units  SC
May be repeated three times
Variable hours
This activity course will familiarize students with basic, modern dance techniques, center work, movement across the floor and proper alignment. Basic understanding of modern dance history and appreciation of dance as an art will be discussed. CSU, UC

PEDAN-143 Country Western Line Dancing
.5-2 units  SC
May be repeated three times
Variable hours
An activity course introducing the steps, terminology, music, and culture of country-western line dancing. CSU, UC

PEDAN-145 Dance Production
.5-2 units  SC
May be repeated three times
Variable hours
Students will create and stage original student dance compositions. Theory and technique will be studied with emphasis on dance as a performing art and participation in the technical and business aspects of student production. A final dance concert performed by the students will culminate the term’s work. CSU, UC

PEDAN-150 Topics in Dance Arts
.3-4 units  SC
May be repeated three times
Variable hours
A supplemental course in the dance arts to provide a study of current concepts and problems in dance field and related subdivisions. Specific topics will be announced in the schedule of courses. Transfer credit: UC credit limitations. See counselor. CSU

PEDAN-155 World Dance Topics
.3-4 units  SC
May be repeated three times
Variable hours
A supplemental course in World Dance to provide a study of selected cultural traditions. Specific topics such as Japanese, Hawaiian or Mexican dance will be announced in the schedule of courses. CSU, UC (credit limits may apply to UC – see counselor)
PEDAN-160  Beginning Ballroom/Social Dance

.5-2 units  SC
May be repeated three times
Variable hours
An activity course of basic ballroom/social dance (partner) techniques, history, terminology, principles and other elements, including style and rhythm. Several dances will be covered, which may include swing, fox-trot, waltz, rumba, cha-cha, and tango. CSU, UC (credit limits may apply to UC – see counselor).

Physical education intercollegiate – PEIC

Physical Education, Athletics and Dance Division
Dean of Physical Education, Athletics and Dance
Science Center 102
925-685-1230 x 2442

PEIC-200  Intercollegiate Baseball, Men

3 units  SC
May be repeated twice
175 hours activity per term
Recommended: ability to compete at the community college level
Instruction and intercollegiate competition is offered in this sport to those students who are selected based on tryouts prior to each sport’s season. CSU, UC (credit limits may apply to UC see counselor).

PEIC-202A  Intercollegiate Basketball, Men

2 units  SC
May be repeated once
115 hours activity per term
Recommended: ability to compete at the community college level
Note: fall semester only
Instruction and intercollegiate competition is offered in this sport to those students who are selected based on tryouts prior to the beginning of the season. CSU, UC (credit limits may apply to UC – see counselor).

PEIC-202B  Intercollegiate Basketball, Men

1 unit  SC
May be repeated once
60 hours activity per term
Prerequisite: PEIC 202A or tryout audition
Note: spring semester only
Instruction and intercollegiate competition is offered in this sport to those students who are selected based on tryouts prior to the beginning of the season. CSU, UC (credit limits may apply to UC – see counselor).

PEIC-203A  Intercollegiate Basketball, Women

2 units  SC
May be repeated once
115 hours activity per term
Recommended: ability to compete at the community college level
Note: fall semester only
This course will cover instruction and performance in intercollegiate basketball for women. Competition for women will be offered to those students who are selected based on tryouts at the beginning of the basketball season. CSU, UC (credit limits may apply to UC – see counselor).

PEIC-203B  Intercollegiate Basketball, Women

1 unit  SC
May be repeated once
60 hours activity per term
Prerequisite: PEIC 203A or tryout audition
Note: spring semester only
This course will cover instruction and performance in intercollegiate basketball for women. Competition for women will be offered to those students who are selected based on tryouts at the beginning of the basketball season. CSU, UC (credit limits may apply to UC – see counselor).

PEIC-204  Intercollegiate Cross Country, Men

3 units  SC
May be repeated three times
175 hours activity per term
Recommended: high school or college competition or equivalent
Instruction and intercollegiate competition is offered in this sport to those students who are selected based on tryouts prior to the beginning of the season. CSU, UC (credit limits may apply to UC – see counselor).

PEIC-205  Intercollegiate Cross Country, Women

3 units  SC
May be repeated three times
175 hours activity per term
Recommended: high school or college competition or equivalent
Instruction and intercollegiate competition is offered in this sport to those students who are selected based on tryouts prior to the beginning of the season. CSU, UC (credit limits may apply to UC – see counselor).

PEIC-206  Intercollegiate Football, Men

3 units  SC
May be repeated three times
175 hours activity per term
Instruction and intercollegiate competition is offered in football to those students who are selected based on tryouts prior to the beginning of each sport’s season. CSU, UC (credit limits may apply to UC – see counselor).
PEIC-210  Intercollegiate Soccer, Women
3 units  SC
May be repeated three times
175 hours activity per term
Recommended: high school or college competition or equivalent
Instruction and intercollegiate competition is offered in this sport to those students who are selected based on tryouts prior to the beginning of the season. CSU, UC (credit limits may apply to UC – see counselor)

PEIC-215  Intercollegiate Softball, Women
3 units  SC
May be repeated three times
175 hours activity per term
Recommended: high school or college competition or equivalent
Instruction and intercollegiate competition is offered in softball to those students who are selected based on tryouts prior to the beginning of the season. CSU, UC (credit limits may apply to UC – see counselor)

PEIC-216  Intercollegiate Swimming and Diving, Men
3 units  SC
May be repeated three times
175 hours activity per term
Recommended: high school or college competition or equivalent
Instruction and intercollegiate competition is offered in swimming to those students who are selected based on tryouts prior to the beginning of the season. CSU, UC (credit limits may apply to UC – see counselor)

PEIC-217  Intercollegiate Swimming and Diving, Women
3 units  SC
May be repeated three times
175 hours activity per term
Recommended: high school or college competition or equivalent
Instruction and intercollegiate competition is offered in swimming to those students who are selected based on tryouts prior to the beginning of the season. CSU, UC (credit limits may apply to UC – see counselor)

PEIC-218  Intercollegiate Tennis, Men
3 units  SC
May be repeated three times
175 hours activity per term
Recommended: ability to compete at the community college level
Intercollegiate tennis competition, instruction, and conditioning is offered to those students who are selected based on tryouts prior to the beginning of the tennis season. CSU, UC (credit limits may apply to UC – see counselor)

PEIC-219  Intercollegiate Tennis, Women
3 units  SC
May be repeated three times
175 hours activity per term
Recommended: ability to compete at the community college level
Instruction and intercollegiate competition is offered for tennis to those students who are selected based on tryouts prior to the beginning of the tennis season. CSU, UC (credit limits may apply to UC – see counselor)

PEIC-220  Intercollegiate Track and Field, Men
3 units  SC
May be repeated three times
175 hours activity per term
Recommended: high school or college competition or equivalent
Instruction and intercollegiate competition is offered in track and field to those students who are selected based on tryouts prior to the beginning of each season. CSU, UC (credit limits may apply to UC – see counselor)

PEIC-221  Intercollegiate Track and Field, Women
3 units  SC
May be repeated three times
175 hours activity per term
Recommended: high school or college competition or equivalent
Instruction and intercollegiate competition is offered in track and field to those students who are selected based on tryouts prior to the beginning of the season. CSU, UC (credit limits may apply to UC – see counselor)

PEIC-223  Intercollegiate Volleyball, Women
3 units  SC
May be repeated three times
175 hours activity per term
Recommended: ability to compete at the community college level
Instruction and intercollegiate competition is offered in women’s volleyball to those students who are selected based on tryouts prior to the beginning of each sport’s season. CSU, UC (credit limits may apply to UC – see counselor)

PEIC-224  Intercollegiate Water Polo, Men
3 units  SC
May be repeated three times
175 hours activity per term
Instruction and intercollegiate competition is offered in water polo to those students who are selected based on tryouts prior to the beginning of water polo season. CSU, UC (credit limits may apply to UC – see counselor)
Physical education theory – PETHE

Physical Education, Athletics and Dance Division
Dean of Physical Education, Athletics and Dance
Science Center 102
925-685-1230 x 2442

Possible career opportunities
A certified athletic trainer is an allied health care professional who works as a consultant and advisor to athletes, parents and coaches. A certified athletic trainer must obtain a bachelor's degree from a CAAHEP accredited program. After obtaining a BS a graduate can work as a certified athletic trainer, physical therapist, physician, podiatrist or physician assistant.

Associate in science degrees
Coaching
Fitness instruction/personal training
Sports medicine/athletic training

Certificates of achievement
Coaching
Fitness instruction/personal training

Associate in science degree - Coaching
The associate in science degree in physical education: coaching (sport specific) is designed for students who are interested in obtaining a job as an athletic coach. The associate in science degree is appropriate for those students who wish to become a youth or secondary school coach. Specific sport options offered include baseball, basketball, cross-country, football, soccer, softball, swimming, tennis, track and field, volleyball and water polo. Students who wish to transfer to four-year institutions must consult with program faculty and college counselors to insure that the requirements for transfer to appropriate institutions are met. Possible programs at the baccalaureate level include study toward a teaching credential to become a secondary school teacher/coach or other degree preparing the student to become a college coach. To earn a degree, students must complete each course used to meet a major requirement with a "C" grade or better. Certain courses may satisfy both a major and a DVC general education requirement; however the units are only counted once.

general education requirements ......................................27-38
major requirements
HSCI 230 Advanced First Aid and CPR ................................3
PETHE 259 Sports Psychology ........................................3
PETHE 281 Principles of Optimizing Human Performance ....3
PETHE 282 Exercise Techniques and Physical Fitness Testing ....1
PETHE 284 Introduction to Sports Medicine and Athletic Training ........................................3

plus at least 3 units from:
NUTRI 120 Sports Nutrition: Fueling the Athlete ........3
NUTRI 160 Nutrition: Science and Applications ........3

plus at least 3 units from:
PETHE 262 Theory of Coaching Basketball ..................3
PETHE 263 Theory of Coaching Cross Country ........3
PETHE 264 Theory of Coaching Football ..................3
PETHE 265 Theory of Coaching Soccer ..................3
PETHE 266 Theory of Coaching Tennis ..................3
PETHE 267 Theory of Coaching Track and Field ........3
PETHE 268 Theory of Coaching Swimming ........3
PETHE 269 Theory of Coaching Water Polo ........3
PETHE 270 Theory of Coaching Baseball ........3
PETHE 271 Theory of Coaching Softball ........3
PETHE 272 Theory of Coaching Volleyball ........3

plus at least 2 units from: *
PE 106, PE 110, PE 172, PE 173, PE 174, PE 180, PE 182, PE 185, PE 188, PE 190, PE 192, PE 193, PE 199

and

PEIC 200, PEIC 202A or B, PEIC 203A or B, PEIC 204, PEIC 205, PEIC 206, PEIC 210, PEIC 215, PEIC 216, PEIC 217, PEIC 218, PEIC 219, PEIC 220, PEIC 221, PEIC 223, PEIC 224, PEIC 225

* activity course or intercollegiate athletic participation must be selected in area of coaching emphasis

Total units for the major 21-22

electives
units from a selection of degree applicable courses 0-12

Total units for the degree 60

recommended degree electives
BIOSC 139 Human Anatomy ........................................5
PETHE 279 Overview of Sports Medicine and Fitness Professions ........................................3
PETHE 285 Advanced Sports Medicine and Athletic Training ........................................3

Associate in science degree - Fitness instruction/personal training
The associate in science degree in physical education: fitness instruction/personal training is a two-year course of study designed for students who are interested in a career in the fit-
ness industry. The associate in science degree is appropriate for those students who wish to become a personal trainer or fitness instructor. Completion of the degree should also prepare students to successfully pass one of the national personal training certification examinations. Students who intend to transfer to a four-year institution must consult with program faculty and college counselors to insure that the requirements for transfer to appropriate institutions are met. Possible programs of study at the baccalaureate level include kinesiology, exercise science, strength and conditioning. To earn a degree, students must complete each course used to meet a major requirement with a “C” grade or better. Certain courses may satisfy both a major and a DVC general education requirement; however the units are only counted once.

**general education requirements** ........................................... 27-38

**major requirements**

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**plus at least 2 units from:**

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<td>PETHE 285</td>
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**recommended degree electives**

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<td>PSYCH 210</td>
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**Associate in science degree - Sports medicine/athletic training**

The associate in science degree in sports medicine/athletic training is a two-year course of study designed for students interested in becoming allied health care professionals such as athletic trainers or physical therapy aides. It combines academic, laboratory and clinical experience to prepare students for further study or to obtain employment as entry-level rehabilitation/allied health paraprofessional. Earning this degree may facilitate the student’s transfer to a four-year college and/or professional program. Students who wish to transfer must consult with program faculty and college counselors to insure that the requirements for transfer to appropriate institutions are met. Students must complete each course used to meet a major requirement with a “C” grade or better and maintain an overall GPA of 2.75 or better. Certain courses may satisfy both a major and a DVC general education requirement; however the units are only counted once.

**general education requirements** ........................................... 27-38

**major requirements**

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<td>Total units for the degree</td>
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plus at least 3 units from: *
CHEM 108 Introductory Chemistry ........................................ 4
CHEM 109 Introduction to Organic and Biochemistry .......... 4
CHEM 120 General College Chemistry ................................ 5
PHYS 110 Elementary Physics ............................................. 3
PHYS 120 General College Physics ..................................... 4

plus at least 3 units from:
HSCI 230 Advanced First Aid/CPR ...................................... 3
NUTRI 160 Nutrition: Science and Applications ................ 3
PETHE 290 Physical Education and Sports in Society ...... 3

Total units for the major 41.5-45.5
Total units for the degree 62.5-77.5

*One course selection from Biology OR from Chemistry must have a laboratory.

Certificate of achievement - Coaching
The coaching certificate of achievement (sport specific) is a one-year course of study that prepares students to be an effective recreational, youth or secondary school coach. Specific sport options offered include baseball, basketball, cross-country, football, soccer, softball, swimming, tennis, track and field, volleyball and water polo. To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a grade of "C" or better.

required courses

| HSCI 230 | Advanced First Aid/CPR | 3 |
| PETHE 259 | Sports Psychology | 3 |
| PETHE 281 | Principles of Optimizing Human Performance | 3 |
| PETHE 282 | Exercise Techniques and Physical Fitness Testing | 1 |
| PETHE 284 | Introduction to Sports Medicine and Athletic Training | 3 |

plus at least 3 units from:
NUTRI 115 Nutrition and Health: Personal Applications .......... 3
NUTRI 120 Sports Nutrition: Fueling the Athlete .............. 3
NUTRI 160 Nutrition: Science and Applications ............. 3

plus at least 3 units from:
PETHE 262 Theory of Coaching Basketball ....................... 3
PETHE 263 Theory of Coaching Cross Country .................... 3
PETHE 264 Theory of Coaching Football ................................ 3
PETHE 265 Theory of Coaching Soccer ......................... 3
PETHE 266 Theory of Coaching Tennis .......................... 3
PETHE 267 Theory of Coaching Track and Field ............. 3
PETHE 268 Theory of Coaching Swimming .......................... 3
PETHE 269 Theory of Coaching Water Polo ..................... 3
PETHE 270 Theory of Coaching Baseball .......................... 3
PETHE 271 Theory of Coaching Softball ....................... 3
PETHE 272 Theory of Coaching Volleyball ..................... 3

plus at least 2 units from: *
PE 106, PE 110, PE 172, PE 173, PE 174, PE 180, PE 182, PE 185, PE 188, PE 190, PE 192, PE 193, PE 199

PEIC 200, PEIC 202A or B, PEIC 203A or B, PEIC 204, PEIC 205, PEIC 206, PEIC 210, PEIC 215, PEIC 216, PEIC 217, PEIC 218, PEIC 219, PEIC 220, PEIC 221, PEIC 223, PEIC 224, PEIC 225

* Selected activity course or intercollegiate athletic participation must correlate with theory of coaching course.

Total units required: 21-22

Certificate of achievement - Fitness instruction/personal training
The fitness instruction/personal training certificate program is a one-year course of study that prepares students to obtain entry-level employment as a fitness instructor or personal trainer. Completion of the certificate requirements will prepare students to sit for one of the national personal training certification examinations.

To earn a certificate of achievement, a student must complete each course used to meet a certificate requirement with a grade of "C" or better. Certificate requirements are available in the day and evening.

required courses

| HSCI 230 | Advanced First Aid and CPR | 3 |
| PETHE 259 | Sports Psychology | 3 |
| PETHE 280 | Professional Aspects of Personal Training and Fitness Instruction | 3 |
| PETHE 281 | Principles of Optimizing Human Performance | 3 |
| PETHE 282 | Exercise Techniques and Physical Fitness Testing | 1 |
| PETHE 284 | Introduction to Sports Medicine and Athletic Training | 3 |

plus at least three units from:
NUTRI 115 Nutrition and Health: Personal Applications .......... 3
NUTRI 120 Sports Nutrition: Fueling the Athlete .............. 3
NUTRI 160 Nutrition: Science and Applications ............. 3

plus at least 1 unit from:
PE 123 Weight Training for Women .................................. 1
PE 124 Weight Training .............................................. 1

Total units required: 20

PETHE-210 Introduction to Kinesiology
3 units SC
54 hours lecture per term
This is an introductory course that surveys various subdisciplines related to the study of human movement. Students will examine the areas of history, sociology, biomechanics, physiology, and psychology, as they relate to the sport and exercise environment. In addition, students will explore three career pathways involving the study of human movement; teaching, research, and professional practice. CSU
PETHE-240  Topics in PE, Athletics and Dance Theory
.5-3 units  SC
May be repeated three times
Variable hours
Recommended: prerequisites may vary with topic offered, depending upon depth of topic
A supplemental theory course in the Physical education, Athletics and Dance Division to provide a study of topics not covered in the activity classes. Specific theory topics to be announced. See counselor. CSU, UC (credit limits may apply to UC – see counselor)

PETHE-259  Sports Psychology
3 units  SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
This sports psychology course is designed to help students learn psychology skills that can enable them to be aware of the techniques for peak performance in sports. This course will also focus on establishing a winning environment where one can establish a goal and work toward it. CSU

PETHE-260  Secondary School Coaching Certification
.5 unit  SC
May be repeated three times
12 hours lecture / 4 hours laboratory per term
This course includes the legal aspects of coaching, adolescent psychology, sports medicine, regulations of secondary school sports, coaching theory and techniques, first aid, and cardiopulmonary resuscitation (CPR). CSU

PETHE-261  Water Safety Instruction and Advanced Aquatics Concepts
3 units  SC
54 hours lecture per term
Recommended: intermediate swimmer or better; or past competitor in aquatics
This course will provide the student with knowledge, skills and techniques to teach other advanced aquatic concepts. The following areas will be included: (1) Personal water and diving safety, health, strategies, emergency responses and rescues, and professional life guarding and first aid instruction and certification; (2) Instruction and certification for infant to advanced to competitive to customized (adaptive) to fitness and recreational aquatic activities. CSU, UC (credit limits may apply to UC – see counselor)

PETHE-262  Theory of Coaching Basketball
3 units  SC
54 hours lecture per term
The course is designed to give the students an understanding of methods and techniques of instruction, skill analysis, practice progressions and theory of all facets of coaching basketball. This course should meet the need of students and youth coaches in the area. The history, lore, language, rules, philosophy and strategies, basic skills and fundamentals, defensive play, offensive play, shooting, conditioning, mental aspects, methods of program building, and public relations will be covered. CSU, UC (credit limits may apply to UC – see counselor)

PETHE-263  Theory of Coaching Cross Country
3 units  SC
54 hours lecture per term
This course will explore all the factors which play a role in the coaching of cross country runners and teams. The history and lore of the sport, philosophies, motivational style, training techniques and tactics, planning and training for the season and daily practice, race strategy, rules and organization of races, mental preparation, and methods of program building will be covered. CSU, UC (credit limits may apply to UC – see counselor)

PETHE-264  Theory of Coaching Football
3 units  SC
54 hours lecture per term
This course will explore all the factors which play a role in the instruction and preparation of an individual football player and a football team. The history, philosophy, strategies, fundamentals, defensive play, offensive play, special teams, conditioning, training, the mental aspects, team cohesion, rules, methods of program building, and public relations will be covered. CSU, UC (credit limits may apply to UC – see counselor)

PETHE-265  Theory of Coaching Soccer
3 units  SC
54 hours lecture per term
This course will explore all the factors which play a role in the instruction and preparation of soccer players and teams. The history and lore of the sport, philosophy, strategies, general fundamentals, techniques, defensive play, offensive play, shooting, goal tending, conditioning, team training, team cohesion, play rules, etiquette, methods of program building, and public relations will be covered. CSU, UC (credit limits may apply to UC – see counselor)

PETHE-266  Theory of Coaching Tennis
3 units  SC
54 hours lecture per term
This course will explore the factors which play a role in the instruction and preparation of the sport of tennis. The history, philosophy, strategies, and its coaching fundamentals will be covered. CSU, UC (credit limits may apply to UC – see counselor)

PETHE-267  Theory of Coaching Track and Field
3 units  SC
54 hours lecture per term
This course will explore the factors which play a role in the instruction and preparation of the sport of track and field. The history, philosophy, strategies, and its coaching fundamentals will be covered. CSU, UC (credit limits may apply to UC – see counselor)
PETHE-268 Theory of Coaching Swimming  
3 units SC  
54 hours lecture per term
This course will explore all the factors which play a role in the instruction, conditioning, and mental preparation for the swimmer and swimming team. The history and lore of the sport, the philosophy of coaching, the scientific principles involved in training and teaching of the competitive strokes, starts, and turns. The planning of a season’s training program as well as the daily organization of practice. The mental preparation for competition. The methods of program building and public relations will be covered. CSU, UC (credit limits may apply to UC – see counselor)

PETHE-269 Theory of Coaching Water Polo  
3 units SC  
54 hours lecture per term
This course will explore the factors which play a role in the instruction and preparation of the sport of water polo. The history, philosophy, strategies, and its coaching fundamentals will be covered. CSU, UC (credit limits may apply to UC – see counselor)

PETHE-270 Theory of Coaching Baseball  
3 units  
54 hours lecture per term
The student will explore various aspects of baseball including history, game strategies, rule book interpretations, scientific principles applied to fundamental skills, and motivational stories of the game of baseball. CSU, UC (credit limits may apply to UC – see counselor)

PETHE-271 Theory of Coaching Softball  
3 units SC  
54 hours lecture per term
This course will explore all the factors which play a role in the instruction and preparation of the softball player and team. The history of the game, philosophy and strategy, general fundamental, defensive play, offensive play, hitting, pitching, conditioning, team training and mental aspects of the game will be studied. CSU, UC (credit limits may apply to UC – see counselor)

PETHE-272 Theory of Coaching Volleyball  
3 units SC  
54 hours lecture per term
This course will explore aspects of volleyball, including history, fundamental skills and techniques, offensive and defensive patterns of play, game strategies, rule book interpretations, language and lore of the game, the physical and mental conditioning needed to compete, and the methods of program building and public relations. CSU, UC (credit limits may apply to UC – see counselor)

PETHE-273 Track and Field Officiating  
2 units CR/NC  
18 hours lecture / 54 hours laboratory per term
The primary focus of this course is to educate athletes, former athletes, coaches and current track and field officials on the aspects of track and field officiating. A secondary focus is to keep students current on rule changes, processes and procedures. CSU

PETHE-279 Overview of Sports Medicine and Fitness Professions  
2 units SC  
36 hours lecture per term
This course will acquaint students with various sports medicine, fitness and health care professions. Information to be presented includes job descriptions, educational and certification requirements, work environment and potential salary range. CSU

PETHE-280 Professional Aspects of Personal Training and Fitness Instruction  
3 units SC  
54 hours lecture per term
This course is for students who are or aspire to be fitness instructors. It will provide practical information on how to become certified as a personal trainer, effectively work with clients, and start and manage a personal training business. CSU

PETHE-281 Principles of Optimizing Human Performance  
3 units SC  
54 hours lecture per term
This course explores the body’s adaptations to exercise and teaches students how to develop strength and conditioning programs to maximize these adaptations. The information presented is valuable for students interested in professions such as personal training, physical therapy, athletic training / sports medicine, teaching and coaching, as well as for people who just want to improve their own athletic performance. This knowledge should allow students to sit successfully for the A.C.E. and N.S.C.A. personal training exams. CSU, UC (credit limits may apply to UC – see counselor)

PETHE-282 Exercise Techniques and Physical Fitness Testing  
1 unit SC  
54 hours laboratory per term
Recommended: previous or concurrent enrollment in PETHE 281
This course is a companion laboratory course to PETHE 281. It will teach students how to instruct others in the proper techniques of strength training and conditioning exercises. It will also teach students how to assemble and conduct testing programs to determine fitness levels and evaluate progress in exercise programs. This knowledge will assist students in passing personal training exams given by organization such as A.C.S.M. and N.S.C.A. CSU, UC (credit limits may apply to UC – see counselor)
PETHE-283 Introduction to Sports Massage
1.5 units SC
May be repeated three times
18 hours lecture / 27 hours activity per term
This course will present the theory of massage and its role in treating athletic injuries. It will also give the students experience in the application of a variety of massage techniques. CSU

PETHE-284 Introduction to Sports Medicine and Athletic Training
3 units SC
36 hours lecture / 54 hours laboratory per term
Recommended: eligibility for ENGL 116/118
This course will provide the future coach, athletic trainer and other health care providers with the basic theoretical knowledge and practical skills necessary for the proper and effective management of common sports-related injuries. The students will also develop the ability to recognize these injuries, manage emergency situations and apply preventative taping. CSU, UC (credit limits may apply to UC – see counselor)

PETHE-285 Advanced Sports Medicine and Athletic Training
3 units SC
36 hours lecture / 54 hours laboratory per term
Prerequisite: PETHE 284
Recommended: eligibility for ENGL 122 or equivalent
This course builds on concepts from PETHE 284. It will provide the student with the theoretical knowledge and practical skills necessary for athletic injury evaluation and rehabilitation. The medical and surgical management of sports-related injuries will be discussed in presentations by orthopedic surgeons and podiatrists. CSU

PETHE-286 Beginning Clinical Experiences in Sports Medicine and Athletic Training
2 units SC
108 hours laboratory per term
Prerequisite: PETHE 284 (may be taken concurrently)
This course will expose the student to basic athletic injury prevention and care. The student will observe and assist the Athletic Trainer in administering health care to the DVC athletes. Skills to be learned and performed include prophylactic taping and wrapping, first aid, and modality application. CSU

PETHE-287 Intermediate Clinical Experiences in Sports Medicine and Athletic Training
2 units SC
108 hours laboratory per term
Prerequisite: PETHE 285 (may be taken concurrently) and PETHE 286
This course will expose the student to athletic injury evaluation and career exploration. The student will observe and assist the athletic trainer in evaluating and treating DVC athletes. This will be augmented by off-campus observations of physicians and therapists. CSU

PETHE-288 Advanced Clinical Experiences in Sports Medicine and Athletic Training
2 units SC
May be repeated once
108 hours laboratory per term
Prerequisite: PETHE 287
Recommended: PETHE 281
This course will expose the student to advanced athletic injury evaluation and rehabilitation. The emphasis in this course will be problem solving. The student will observe and assist the athletic trainer in evaluating and rehabilitating DVC athletes. This will be augmented by off-campus observations of surgeries, physical therapists and trainers. CSU

PETHE-290 Physical Education and Sports in Society
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
An introduction to the academic aspects of physical education and sports. It emphasizes the roles physical education and athletics play in society and the historical, cultural, psychological, physiological, kinesiological and educational contributions it has made to humans. CSU, UC (credit limits may apply to UC – see counselor)

PETHE-298 Independent Study
.5-3 units SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department and Instruction Office; topics must extend study beyond courses offered.
An opportunity for students to study special interests under the direction of the faculty. CSU, UC (credit limits may apply to UC – see counselor)

Physical science – PHYSC

Physical Sciences and Engineering Division
Dennis Smith, Dean
Physical Sciences Building 261
925-685-1230 x 2359

Possible career opportunities
Physical science focuses on concepts, processes and the interrelationship of physical phenomena as studied in any combination of the physical science disciplines, such as astronomy, earth science and physics. There are several career options in academics – research and teaching, as well as applied science and industry. Many of the career options require advanced and specialized training in one or a combination of the sub-disciplines of physical science.
PHYSC-112  Fundamentals of Physical Science
3 units  LR
54 hours lecture per term
Prerequisite: MATH 110 or equivalent
Recommended: eligibility for ENGL 122
Note: collegiate-level course not intended for those who have taken high school chemistry and physics, or college physics or are currently taking college physics.
A study of the physical sciences of astronomy, physics, and chemistry. The principles developed will be used to elucidate present day knowledge of the universe and mankind’s physical environment. CSU, UC (credit limits may apply to UC – see counselor)

PHYSC-150  Topics in Physical Science
1-3 units  LR
May be repeated three times
Variable hours
A supplemental course designed to provide instruction in areas of the physical sciences not covered by any of the present courses. Specific topics to be announced. CSU, UC (credit limits may apply to UC – see counselor)

PHYSC-298  Independent Study
.5-3 units  SC
May be repeated three times
Variable hours
Prerequisite: Submission of acceptable educational contract to department and instruction office; topics must extend beyond courses offered
An opportunity for students with special interests in a particular field to undertake special studies in that field under direction of the faculty. CSU, UC (credit limits may apply to UC – see counselor)

Physics – PHYS

Physical Sciences and Engineering Division
Dennis Smith, Dean
Physical Sciences Building 261
925-685-1230 x 3359

Possible career opportunities
Career opportunities available for physicists include: research in industry, universities, and national laboratories. Many teach in high schools, colleges, and universities. Others can be found in hospitals, the military, oil fields, power plants, in the astronaut corps, in museums, in patent law firms, and in management positions in business and government. A background in physics can help a technical writer or a computer programmer. Most career options require more than two years of college study.

PHYSC-110  Elementary Physics
3 units  LR
54 hours lecture per term
Prerequisite: MATH 110 and 114 or equivalent
Recommended: concurrent enrollment in PHYS 111
A study of forces, motion, heat, electricity and magnetism, optics and matter, with discussions, experimental illustration, and problem solving. CSU, UC (credit limits may apply to UC – see counselor)

PHYSC-111  Physics Laboratory
2 units  LR
18 hours lecture / 36 hours laboratory per week
Prerequisite: PHYS 110 (may be taken concurrently)
Recommended: eligibility for ENGL 122
The laboratory experience will include measurement and analysis of mechanical, thermal, electrical and optical phenomena. CSU, UC (credit limits may apply to UC – see counselor)

PHYSC-113  From Atoms to the Big Bang: A World Without Certainty
3 units  LR
54 hours lecture per term
Prerequisite: MATH 110 and 114 or equivalent
Introduction into ideas of modern physics, including special and general relativity, atoms, wave-particles, uncertainties, origin of the universe, non-locality. Exploration of how the modern physical world-view and cosmology can or cannot be reconciled with some ideas of philosophy may be included. CSU

PHYSC-120  General College Physics
4 units  LR
90 hours lecture / 36 hours laboratory per term
Prerequisite: MATH 121 or equivalent
Recommended: eligibility for ENGL 122 or equivalent
First semester college physics for Life Science majors and others. A lecture and laboratory study of mechanics, heat and sound. CAN PHYS 2 PHYS 120+121 = PHYS SEQ A, CSU, UC (credit limits may apply to UC – see counselor)

PHYSC-121  General College Physics
4 units  LR
90 hours lecture / 36 hours laboratory per term
Prerequisite: PHYS 120
Second semester college physics for Life Science majors and others. A lecture and laboratory study of electricity, magnetism, light and modern physics. CAN PHYS 4 PHYS 120+121 = PHYS SEQ A, CSU, UC (credit limits may apply to UC – see counselor)
PHYS-124  Calculus Supplement for Physics 120  
.5 unit  LR  
9 hours lecture per term  
Prerequisite: PHYS 120 (may be taken concurrently) and MATH 182 or MATH 192 (may be taken concurrently).  
Recommended: eligibility for ENGL 122 or equivalent  
This course adds calculus to the mathematical techniques used in PHYS 120 (general physics). This course is required of Architecture and Biological Science majors transferring to UC Berkeley and may be a requirement at other UC campuses. CSU, UC (credit limits may apply to UC – see counselor).

PHYS-125  Calculus Supplement for Physics 121  
.5 unit  LR  
9 hours lecture per term  
Prerequisite: PHYS 121; and MATH 183 or MATH 193 (all may be taken concurrently)  
Recommended: eligibility for ENGL 122 or equivalent  
This course adds calculus to the mathematical techniques used in PHYS 121 (general physics). This course is required of Architecture and Biological Science majors transferring to UC Berkeley and may be a requirement at other UC campuses. CSU, UC (credit limits may apply to UC – see counselor).

PHYS-129  Introductory Physics for Engineers  
4 units  SC  
90 hours lecture / 36 hours laboratory per term  
Co-requisite: MATH 192 or equivalent (may be taken previously)  
Recommended: eligibility for ENGL 122 or equivalent  
A core study of vectors, motion, forces, momentum, energy and rotating systems. One or more additional topics such as geometric optics, electricity, the atomic nature of matter or the study of fluids will also be presented. In order to prepare the student for success in the engineering physics sequence, the student will be introduced to basic vocabulary and techniques of studying physics. Portions of this course may be taught online, for example: problem-solving or discussion. Recommended for students who are not confident in their basic physics skills, especially those who have never had physics before. CSU, UC (credit limits may apply to UC – see counselor).

PHYS-130  Physics for Engineers and Scientists  
4 units  LR  
90 hours lecture / 36 hours laboratory per term  
Prerequisite: MATH 129 or high school physics or equivalent; MATH 193 (may be taken concurrently)  
Recommended: eligibility for ENGL 122; knowledge of one computer language  
Physics for engineering, physics, and chemistry majors. A lecture and laboratory study of mechanics. CAN PHYS 8 PHYS 130+230+231 = CAN PHYS SEQ B, CSU, UC (credit limits may apply to UC – see counselor).

PHYS-150  Topics in Physics  
.5-4 units  LR  
May be repeated three times  
Variable hours  
This is a supplemental course designed to provide instruction in areas of physics not covered by any of the present courses. Specific topics will vary and will be announced. CSU, UC (credit limits may apply to UC – see counselor).

PHYS-230  Physics for Engineers and Scientists  
4 units  LR  
90 hours lecture / 36 hours laboratory per term  
Prerequisite: PHYS 130 or equivalent; MATH 292 (may be taken concurrently).  
Recommended: eligibility for ENGL 122  
A continuation of Physics 130. Fundamentals of thermodynamics, electricity, and magnetism. CAN PHYS 12 PHYS 130 + 230 + 231 = CAN PHYS SEQ B, CSU, UC (credit limits may apply to UC – see counselor).

PHYS-231  Physics for Engineers and Scientists  
4 units  LR  
90 hours lecture / 36 hours laboratory per term  
Prerequisite: MATH 294 or equivalent (may be taken concurrently)  
Recommended: PHYS 230; eligibility for ENGL 122  
Knowledge of one computer programming language  
Electromagnetic waves, optics, nature and propagation of light, modern physics, including theory of relativity, quantum physics in one and three dimensions. Particle physics. CAN PHYS 14, PHYS 130 + 230 + 231 = CAN PHYS SEQ B, CSU, UC (credit limits may apply to UC – see counselor).

Plumbing – PLUMB
Physical Sciences and Engineering Division  
Dennis Smith, Dean  
Physical Sciences Building 261  
925-685-1230 x 2359

PLUMB-150  Topics in Plumbing  
.3-4 units  SC  
May be repeated three times  
Variable hours  
A supplemental course in Plumbing to provide a study of current concepts and problems in Plumbing and related subdivisions. Specific topics will be announced in the schedule of courses.
PLUMB-151 Related Training in Plumbing
2 units LR
18 hours lecture / 54 hours laboratory per term
Recommended: registered as an apprentice in the plumbing trade, with the ability to profit from the instruction; must be taken in sequence
Related technical instruction, supplementary to the apprentice’s on-the-job training, beginning with knowledge of the trade, safety, related math and basic processes and progressing through eight to ten terms of related instruction.

PLUMB-152 Related Training in Plumbing
2 units LR
18 hours lecture / 54 hours laboratory per term
Recommended: registered as an apprentice in the plumbing trade, with the ability to profit from the instruction; must be taken in sequence
Related technical instruction, supplementary to the apprentice’s on-the-job training, beginning with knowledge of the trade, safety, related math and basic processes and progressing through eight to ten terms of related instruction.

PLUMB-153 Related Training in Plumbing
2 units LR
18 hours lecture / 54 hours laboratory per term
Recommended: registered as an apprentice in the plumbing trade, with the ability to profit from the instruction; must be taken in sequence
Related technical instruction, supplementary to the apprentice’s on-the-job training, beginning with knowledge of the trade, safety, related math and basic processes and progressing through eight to ten terms of related instruction.

PLUMB-154 Related Training in Plumbing
2 units LR
18 hours lecture / 54 hours laboratory per term
Recommended: registered as an apprentice in the plumbing trade, with the ability to profit from the instruction; must be taken in sequence
Related technical instruction, supplementary to the apprentice’s on-the-job training, beginning with knowledge of the trade, safety, related math and basic processes and progressing through eight to ten terms of related instruction.

PLUMB-155 Related Training in Plumbing
2 units LR
18 hours lecture / 54 hours laboratory per term
Recommended: registered as an apprentice in the plumbing trade, with the ability to profit from the instruction; must be taken in sequence
Related technical instruction, supplementary to the apprentice’s on-the-job training, beginning with knowledge of the trade, safety, related math and basic processes and progressing through eight to ten terms of related instruction.
PLUMB-270  Plumbing Blueprint Reading and Pipe Layout
2 units LR
18 hours lecture / 54 hours laboratory per term
Recommended: PLUMB 254 or equivalent
Plumbing blueprint reading and pipe layout.

PLUMB-298  Independent Study
.5-3 units LR
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond current courses offerings.
An opportunity for advanced students to study special interests under the direction of the faculty. CSU

Political science – POLSC

Social Sciences Division
Lyn Krause, Dean
Faculty Office 134
925-685-1230 x 2518

Possible career opportunities
Political science courses offer insight into events at the local, state, national, and international level. Students develop critical thinking and other useful skills for a broad range of careers including education, public service and law. Most career options require more than two years of college study.

POLSC-120  Introduction to Politics
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
Introduction to the concepts of politics and the state and relationship of the state and individual, as applied to the American political system. Comparison of the American and selected other political systems. CSU, UC

POLSC-121  Introduction to United States Government
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
The course is a survey of the American political framework and process. The course covers the Constitutional structure and functions of the legislative, executive and judicial branches at national, state and local levels, viewed in the context of political culture, political parties, pressure groups and citizenship. Emphasis will be placed on the impact of federal, state and local governments in California. CAN GOVT 2, CSU, UC

POLSC-151  Issues in State and Local Politics
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
Investigation and analysis of selected major issues of California politics and government including the roles and responsibilities of governmental agencies; the importance of local political entities; and evaluation of policy choices. CSU

POLSC-155  Topics in Politics
.5-3 units SC
May be repeated twice
Variable hours
Recommended: eligibility for ENGL 122
Focus on a selected topic in politics and government. The topics to be offered each term will be indicated in the current course schedule. CSU, UC (credit limits may apply to UC – see counselor)

POLSC-220  Comparative Politics
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
A comparative analysis of the political systems of selected foreign states. An investigation of the origins and nature of politics, philosophies, and cultures and their expression in political institutions and processes. CSU, UC

POLSC-240  Political Theory
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
A survey of selected political theorists and concepts and / or issues from Plato to the present. Includes analysis of theoretical approaches used to explain, instruct, and justify the distribution of political power in societies. CSU, UC

POLSC-250  International Relations
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
Introduction to various aspects of international relations and politics. Consideration of such topics as the sovereign and national state and international politics, the nature of the world community, international law, world economics, the United Nations and other international organizations, and contemporary world problems. CSU, UC

POLSC-298  Independent Study
.5-3 units SC
May be repeated twice
Variable hours
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond current course offerings
An opportunity for advanced students to study special interests under the direction of the faculty. CSU, UC (credit limits may apply to UC – see counselor)
 Portugese – PORT

PORT-150 Topics in Portuguese
.3-4 units SC
May be repeated three times
Variable hours
A supplemental course in Portuguese to provide a study of current concepts and problems in Portuguese and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

Psychology – PSYCH

Social Sciences Division
Lyn Krause, Dean
Faculty Office 134
925-685-1230 x 2518

Possible career opportunities
Psychology students will find classes related to helping them understand, predict, and deal with their own behavior and that of others. Careers include education, school psychologist, advisor, and counselor. Most career options require more than two years of college study.

PSYCH-115 Resiliency and Student Success
1 unit CR/NC
18 hours lecture per term
Recommended: eligibility for ENGL 116 or equivalent
A course designed to help students identify automatic thoughts and to practice new critical thinking skills to become more resilient in dealing with problems and more successful in educational endeavors. Students will have the opportunity to gain new insight into their own thought processes while learning constructive ways to deal with anxiety and adversity. Students will also learn ways to improve relationships through more effective means of communication. CSU

PSYCH-122 Psychology in Modern Life
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course examines the psychological and physiological, and cultural factors involved in personality development, interpersonal relationships, and the relevance of psychology to social processes. CSU, UC

PSYCH-130 Emotions, Learning and the Brain
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course examines the psychology of emotions and social behavior. The brain is used as a model to describe motor, visual, and conceptual development; processes of emotion and learning as interactions between brain and environment; learning disabilities of children and adults. Information and theory will be examined for practical application. CSU, UC

PSYCH-140 Psychology of African-Americans in a Multicultural Society
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course is a study of the behavior patterns and psychological experiences of African-Americans in the multicultural U.S. Particular attention will be paid to cultural, social, and historical contributions of African-Americans, and how they have been viewed in relation to Latino/as, Native Americans, and Asian-Pacific American over time. Topics chosen reflect the reciprocal impacts between majority European American culture in relation to historical waves of immigration of various different minority groups, using African Americans as a historical starting place. CSU, UC

PSYCH-141 Psychology of Latinos/Chicanos in the U.S.
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course is a study of the behavior patterns and psychological experiences of a variety of different groups within the Latino/Chicano cultural collective. Topics chosen reflect the reciprocal impacts between majority European American culture in relation to historical waves of immigration of various different Latino groups. Included among topics will be assimilation, resistance, and acculturation between the groups and the social and political outcomes resulting from these interactions. Particular attention will be paid to cultural, social, and historical contributions of groups within the Latino collective, and how Latino groups have been viewed in relation to African Americans, Native Americans, and Asian Pacific Americans over time. CSU, UC

PSYCH-155 Topics in Psychology
.5-3 units SC
May be repeated three times
Variable hours
Recommended: eligibility for ENGL 122 or equivalent
An in-depth study of selected topics and techniques related to psychological aspects of human behavior and experience. CSU, UC (credit limits may apply to UC – see counselor)

PSYCH-160 Psychology of Women
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
Note: formerly PSYCH-150
Examination of various factors in the development of gender identity, including personality, social processes, biology, and culture. CSU
PSYCH-190  Psychology of Adolescence
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
A survey of adolescent development and the problems of adolescents highlighting topic areas which would include adolescent values and attitudes; adolescent self-concept, self-esteem and identity; adolescent sex-role socialization; parent and family influence on adolescent socialization; peer group influence on adolescent development. CSU, UC

PSYCH-210  General Psychology
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
PSYCH 210 is a study of the major theories, concepts, and findings of modern psychology. The orientation of the course is the scientific study of behavior and mental processes, and covers such areas as: the history and systems of psychology, the biological foundations of behavior, perception, states of consciousness, learning, memory, motivation, emotion, human development, personality, stress and health, abnormal psychology, therapies, and social psychology. CAN PSY 2, CSU, UC

PSYCH-220  Psychology of Personality: Personal, Social, Cultural Differences
3 units SC
54 hours lecture per term
Recommended: PSYCH 122 or 210; eligibility for ENGL 122 or equivalent
This course builds upon the insights and understanding of the basic concepts of psychology to probe further into the dynamics of personality development. Particular emphasis is placed on contrasting the ideas and methodologies of the different schools of psychology. The nature-nurture and the cultural relativity controversies are examined. Students gain an appreciation of the temporal and cultural context for understanding human behavior. CSU, UC

PSYCH-230  Abnormal Psychology
3 units SC
54 hours lecture per term
Recommended: eligibility ENGL 122 or equivalent
A study of the causes and symptoms of psychological disorders, highlighting the latest biological findings; topic areas include cultural differences, controversies, and the treatment and prevention of behavior disorders; multiple theoretical perspectives are used to examine the biological, psychological, and social factors creating abnormality; the DSM classification system and cases are used to illustrate symptoms. CSU, UC

PSYCH-240  Transpersonal Psychology
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
Transpersonal means beyond the personal and is a departure from traditional psychological models of humankind that emphasize personal adjustment without examining the larger philosophical context in which the adjustment takes place, and with those schools of psychology that view humans in a mechanistic fashion. Transpersonal psychology suggests that there are extraordinary possibilities in ordinary people but that these are latent and need be developed. In exploring this theme many differing approaches from ancient spiritual to modern scientific are critically examined. Particular emphasis is given to the study of current research in altered states of consciousness. CSU, UC

PSYCH-298  Independent Study
.5-3 units SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered
An opportunity for students to study special interests under direction of the faculty. CSU, UC (credit limits may apply to UC – see counselor)

Real estate – RE
See Business-Real Estate – RE

Respiratory therapy – RT

Associate in science degree - respiratory therapy
The respiratory therapy (RT) program is offered as a conjoint program with Ohlone College in Fremont. Students complete general education courses at DVC, laboratory and clinical courses at Ohlone College, and have supervised clinical practice at local hospitals. Certain RT classroom courses are offered at the DVC San Ramon Valley Campus; students should refer to the college schedule.

This program prepares students to be respiratory therapists in one of the fastest-growing allied health professions in the nation. Therapists are involved in the diagnosis, treatment, management and care of patients with deficiencies and abnormalities associated with the cardio respiratory system, in both hospital and home environments. Completion of this CAAHEP (Commission on Accreditation of Allied Health Education Program) makes graduates eligible for the California state license examination for respiratory care practitioner (RCP) and the registered respiratory therapist (RRT) credentialing examination of the National Board for Respiratory Care (NBRC).

By completing the general education coursework at DVC and the RT coursework at Ohlone, students will receive a certificate of completion and A.S. degree from Ohlone College. Students must maintain a 2.0 grade point average or better. For applications and information, contact the Career Development Office located in the Student Services Building.
**Program prerequisites or equivalent**

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<td>ENGL 122</td>
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<td>MATH 110</td>
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**Total prerequisite units** 11

**Required general education courses**

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<td>PSYCH 122</td>
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**Total general education units** 15

**Major requirements**

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**Plus all units from:**

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**Plus at least 4 units from:**

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<td>RT 145*</td>
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**Total major units** 44.5

**Total units required** 85.5-89.5

**Certificate of completion - Russian**

The study of Russian can open up opportunities in communications, foreign trade and banking, transportation, government, the Foreign Service, tourism, library services, teaching, professional translating, journalism, and all levels of education, including university teaching. Most foreign language careers require more than two years of study.

To earn a certificate, students must complete each course used to meet a certificate requirement with a “C” grade or better.

**Possible career opportunities**

This certificate prepares students with an intermediate to advanced knowledge of Russian and familiarizes them with the culture of Russia and other Russian-speaking countries.

Students with prior foreign language instruction should check with a language teacher regarding their proper placement in foreign language courses. The following system is generally used to determine the appropriate term of college work based on high school language: two years equal one college term; three years equal two college terms; four years equal three college terms.

**Prerequisites**

- Area I, Area II, Area IV-A, Area IV-C – met by RT major and general education requirements
- Area III – 3 units - use any DVC GE Area III
- Area IV-B – 3 units - use any DVC GE Area I-B
- Area V – 1 unit - use any DVC GE Area V-C (minimum of 2 PE classes including PEDAN)
- Area VI - 0-3 units - use any DVC GE Area VI
- Area VII - 0-1 unit required - DVC equivalent: LS 121

**Total units required** 85.5-89.5
RUSS-120  First Term Russian
5 units  SC
90 hours lecture / 18 hours laboratory by arrangement per term
This is a basic course in understanding, speaking, reading and writing Russian. It offers a balanced approach to the language and culture. Basic communicative functions and structures are introduced as well as a basic exploration of the culture of the Russian-speaking world. Declensions in the prepositional and accusative cases and the present tense are stressed. CAN RUSS 2; RUSS 120+121 = CAN RUSS SEQ A, CSU, UC

RUSS-121  Second Term Russian
5 units  SC
90 hours lecture / 18 hours laboratory by arrangement per term
Recommended: RUSS 120 or equivalent
A second semester course providing further development of verb patterns as well as other grammar forms. There is expansion of vocabulary and emphasis on writing and sentence structure. Declensions in the singular genitive and dative cases and the past and future tenses are stressed. CAN RUSS 4, RUSS 120+121 = CAN RUSS SEQ A, CSU, UC

RUSS-150  Topics in Russian
3-4 units  SC
May be repeated three times
Variable hours
A supplemental course in Russian to provide a study of current concepts and problems in Russian and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

RUSS-220  Third Term Russian
5 units  SC
90 hours lecture / 18 hours laboratory by arrangement per term
Recommended: RUSS 121 or equivalent
This is a third semester course which delves more extensively into the declensions of nouns and the coordination of various case endings, including the accusative and genitive plurals and the instrumental cases. Reflexive, imperfective and perfective verbs are introduced and reading and writing continues at an increasing level of complexity. There is a continued study and interpretation of Russian and Soviet culture through literature and selected articles. CAN RUSS 8, RUSS 220+221 = CAN RUSS SEQ B, CSU, UC

RUSS-221  Fourth Term Russian
5 units  SC
90 hours lecture / 18 hours laboratory by arrangement per term
Recommended: RUSS 220 or equivalent
This is a fourth semester course which refines understanding, speaking, reading, and writing Russian and a continuation of the study of Russian literature and history. The course expands on the study and interpretation of Russian and Soviet culture, with emphasis on current events. Verbs of asking, declensions of last names and additional uses of the instrumental case will be covered. CAN RUSS 10, RUSS 220+221 = CAN RUSS SEQ B, CSU, UC

Sign language – SIGN

Social Sciences Division
Lyn Krause, Dean
Faculty Office 134
925-685-1230 x 2518

Possible career opportunities
Sign language will help to prepare the student to communicate and work with deaf and hard of hearing people. There is a need for skilled, qualified sign language interpreters in educational and social service agencies. Teachers, human services providers, or independent living attendants also sometimes use sign language in their work. Some career options require more than two years of college study.

SIGN-266  Sign Language: SEE I
3 units  SC
May be repeated once
54 hours lecture per term
Recommended: eligibility for ENGL 122
This course provides a basic vocabulary of 500 S.E.E. (Signing Exact English) signs, and instruction in finger spelling for parents and family of hearing impaired / deaf or others with communication barriers. These skills are useful to students interested in special education, interpreting, community service careers, as well as those curious about sign language. CSU

SIGN-267  Sign Language: SEE II
3 units  SC
54 hours lecture per term
Prerequisite: SIGN 266 or equivalent
Recommended: eligibility for ENGL 122 or equivalent
This course continues the instruction of finger spelling and SEE. Sign language skills begin in SIGN 266. The cumulative vocabulary will build to approximately 1000 signs. Finger spelling practice will continue to develop clarity and speed. CSU

SIGN-268  Sign Language: SEE III
3 units  SC
54 hours lecture per term
Prerequisite: SIGN 266 and 267 or equivalent
Note: meets the State Department of Social Services licensing requirement for DSS III, Program and Curriculum Development.
This course continues the instruction of finger spelling and S.E.E. sign skills begun in SIGN 266 and 267; leading to a cumulative vocabulary of approximately 1750 signs with improved receptive and expressive ability. These skills are useful to parents and family of hearing impaired/deaf, others with communication barriers, students interested in special education, interpreting, community service careers, as well as those curious about sign language. CSU
SIGN-280  American Sign Language (ASL) I
3 units SC
May be repeated once
54 hours lecture per term
Recommended: eligibility for ENGL 122
Note: meets the State Department of Social Services licensing requirement for DSS III, Program and Curriculum Development
Designed for students interested in learning beginning American Sign Language, a language developed in a visual/gestural mode, and used by the general American deaf population. Also designed to increase the student's awareness of the deaf culture. CSU, UC

SIGN-281  American Sign Language (ASL) II
3 units SC
54 hours lecture per term
Prerequisite: SIGN 280
Recommended: eligibility for ENGL 122
Note: meets the State Department of Social Services licensing requirement for DSS III, Program and Curriculum Development.
Course builds on basic principle and vocabulary introduced in American Sign Language I. Emphasis on grammatical principles of ASL in order to provide an essential framework for acquiring a good command of the language. Continued experience in the deaf culture. CSU, UC

SIGN-282  American Sign Language (ASL) III
3 units SC
54 hours lecture per term
Prerequisite: SIGN 280 and 281 or equivalent
Recommended: eligibility for ENGL 122
Note: meets the State Department of Social Services licensing requirement for DSS III, Program and Curriculum Development.
Using ASL I and II as a base, this course expands vocabulary and grammatical skills. It will further develop conversational skills and lead to an appreciation of the deaf culture and history. CSU, UC

SOCSC-110  General Course in Social Science
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
An examination of the historical development of American culture and institutions in order to understand differing perspectives on the individual in society. Particular attention is given to: a) the historical development of social science theories for explaining the individual in society, and b) the implications of these theories for the individual’s life in contemporary America and America of the past. Emphasis is given to the historical development of social class, race, ethnicity, and gender in the United States from colonial times to the present. CSU, UC

SOCSC-111  Money, Power and Politics in the United States
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
A multidisciplinary, integrative study of the concepts of democracy and the historical, political and economic processes through which democracy has arisen in the United States, with emphasis on the U.S. Constitution and state and local government in California. Particular attention is given to the contributions to American democracy by diverse social groups, and the international context of American political and economic life. CSU, UC

SOCSC-115  Citizenship and Status: Asian Americans and Pacific Islanders in the U.S.
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
A history of American women from the Progressive Era (1890) to present, emphasizing both the commonalities of women’s experience based on their gender, and the differences among women based on their ethnic identification, social class and region including the interaction between and contributions of Native American, African American, Asian American and Mexican/Latina women. The course will focus on political, economic and cultural change in the U.S., how women have
fostered it and been affected by it, and on the changing roles of
women in the family and continuity of the American experience.
In addition analysis of the political philosophies of the framers
of the U.S. constitution and the rights and obligations of citizens
under the U.S. Constitution with an emphasis on gender issues
will be covered. CSU, UC

SOCSC-123 American Popular Culture
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
A historical, sociological, psychological, and cultural examina-
tion of the ways popular culture shapes and reflects American
institutions and American values. CSU, UC (credit limits may
apply to UC – see counselor)

SOCSC-125 Social Science Techniques and Field
Studies
3 units SC
May be repeated three times
54 hours lecture per term
Recommended: eligibility for ENGL 122
Examines and utilizes methodology and techniques of the social
science disciplines to develop and complete an independent
research project. Areas of exploration include a community’s
cultural, economic, and political concerns, historical sites, orga-
nizations, etc. CSU, UC

SOCSC-155 Topics in Social Science
.5-3 units SC
May be repeated three times
Variable hours
Recommended: eligibility for ENGL 122
Focus on a selected topic in the social sciences taught with an
interdisciplinary viewpoint. The topic to be offered each term
will be indicated in the current schedule of courses. CSU, UC
(credit limits may apply to UC – see counselor)

SOCSC-160A Conflict Resolution Between
Individuals
1.5 units SC
27 hours lecture per term
Recommended: eligibility for ENGL 118
An interdisciplinary course exploring theories of conflict and its
resolution. Emphasis will be on solving cases involving conflict
between individuals. CSU

SOCSC-162 Italian Life and Culture
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
An inquiry into Italian life and culture, from its historical origins
through contemporary perspectives. Includes an introduction to
Italian society and civilization through readings, lectures, semi-
nar presentations/discussions, Italian guest speakers and field
trips. Topics include the government, political parties, regional
and ethnic identity, the Mafia, common market, media, sports,
gastronomy, art, literature, music, language, Church-State rela-
tions, sexuality, the family and urban life. Takes a social, histori-
cal and cultural approach to the study of contemporary Italian
society. CSU

SOCSC-163 French Life and Culture
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
A survey of French life and culture in historical and contemporary
perspective. Specifically, the course will cover the history, poli-
tics, economics, culture, and society of modern-day France. CSU

SOCSC-220 Women in United States Society
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
A multicultural and interdisciplinary examination of women’s
changing roles in U.S. society. Examines the social institutions
and values which shape those roles, including federal, state,
and local governments, as well as the U.S. and California
Constitutions. The course considers the significant events and
developments shaping the social, political, and economic status
of women. It will also consider the importance of race/ethnicity,
class, region, and sexual orientation in differentiating the experi-
ences and opportunities for women. CSU, UC

SOCSC-298 Independent Study
.5-3 units SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract
to department and instruction office; topics must extend study
beyond courses offered
Selected students may pursue independent study in the social
sciences under the guidance of the social science faculty. CSU, UC
(credit limits may apply to UC – see counselor)

SOCIO

Social Sciences Division
Lyn Krause, Dean
Faculty Office 134
925-685-1230 x 2518

Possible career opportunities
Sociology provides students with career opportunities including
criminologist, employment counselor, interviewer, researcher,
social worker, and urban planner. Most career options require
more than two years of college study.
SOCIO-120 Introduction to Sociology
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
An introduction to the theory and scientific methodology of sociology; a survey of the intersections, interrelationships, and processes of society as an organized structure. Course includes an introduction to the disciplines’ substantive areas including methodology, socialization, culture, social stratification, race, ethnic minorities, and begins institutional analysis with the family, religion, and education. CAN SOC 2, CSU, UC

SOCIO-121 Introduction to Social Problems
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
A survey of perspectives on major social problems, primarily in the urban, industrial setting. Includes sources, consequences of and means of coping with a variety of social problems. The scientific methodology required for accurate analysis is emphasized. Topics will be taken from a range of possible items such as problems of the aging, health care needs, mental illness, environmental issuers, labor force conditions, poverty, crime, juvenile delinquency, suicide, addiction, abuse, migration and relations with minority groups, or membership in deviant subcultures. CAN SOC 4, CSU, UC

SOCIO-122 Critical Thinking About Social and Cultural Issues
3 units SC
54 hours lecture per term
Prerequisite: ENGL 122 or equivalent
Critical reasoning in sociology is a process of questioning, analyzing and evaluating oral and written ideas, concepts, and interpretations of the political, economic and social issues and patterns found in human societies. This process will include an introduction to the principles of logic, the structure of language, the scientific method, and prevailing theoretical models in sociology. Specific writing skills will be developed through a series of increasingly complex analytical essays and through instruction in metaphor, analogy, comparing and contrasting, the nature of evidence, as well as essay structure and expression. The goal is for students to learn how to identify sociological viewpoints, to gather and analyze sociological information, to recognize sociological relationships and patterns, and to see the relevance of sociological insight and theories as a background for understanding current events and issuers. CSU, UC

SOCIO-123 Introduction to Social Research
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
A study of the various social research methods and a review of problems in assessing data relating to social life. Topics to be covered include: posing a sociological problem, data-gathering techniques, sampling, measurement, and establishing relationships among data. This class allows students to become involved in the process of conducting survey research and to participate in the use of other social research techniques. CSU, UC

SOCIO-124 Gender, Culture and Society
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
A multidimensional examination of the socialization of sex roles in United States society and other cultures, including the mechanisms by which gender roles develop and the social consequences for society. The course examines the social and cultural processes and institutional arrangements that give meaning to being a woman and a man in society. CSU, UC

SOCIO-125 Introduction to Marriage and Family
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
An examination of basic issues concerning marriage, family and kinship in African American, Euro American, Hispanic, Asian and Native American families. Emphasis on cross-cultural and cross-societal comparisons, kinship groups, the nature of human marriage, relationship of the family to other social institutions, child rearing, plural marriages, family politics, and speculations concerning the future of the family. CAN FCS 12, CSU, UC

SOCIO-131 The Urban Community
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
A multi-cultural look at social change in cities and in the suburbs which examines the experience of African Americans, Latino, Asian-Pacific Americans, Native Americans and Euro Americans, currently and in historical perspective. The course addresses challenges that face people in multicultural communities, neighborhoods and suburbs, and examines programs and strategies that are designed to meet these challenges in US cities and suburbs. CSU, UC

SOCIO-135 Patterns of Ethnic Culture in America
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
The sociological analysis of ethnic cultures in the United States. Topics include political, economic, religious, judicial, and familial organization of ethnic communities, the effects on the dominant society on these institutions and recent socio-political movements. CSU, UC

SOCIO-140 Culture, Society and Personality
3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
An examination of the relationship between personality, social organization, and culture. The course includes such topics as culture and personality, collective behavior, the formation of identity, and cultural values, attitudes, and themes. CSU, UC
Sociology

SOCIO-155  Topics in Sociology  
.5-3 units  SC  
_May be repeated three times_  
Variable hours  
An in-depth study of selected topics, issues, and problems related to sociological aspects of human behavior. The topic to be offered in a particular term is indicated in the current course schedule. CSU, UC (credit limits may apply to UC – see counselor)

SOCIO-298  Independent Study  
.5-3 units  SC  
_May be repeated three times_  
Variable hours  
**Prerequisite:** submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered  
An opportunity for students to study special interests under direction of the faculty. CSU, UC (credit limits may apply to UC – see counselor)

Spanish — SPAN  

Students with prior foreign language instruction should check with a language teacher regarding their proper placement in foreign language courses. The following system is generally used to determine the appropriate term of college work based on high school language: two years equal one college term; three years equal two college terms; four years equal three college terms.

Applied and Fine Arts Division  
Dean of Applied and Fine Arts  
Humanities Building 112 and 113  
925-685-1230 x 2312  

Possible career opportunities  
The study of Spanish can open up opportunities in communications, foreign trade and banking, transportation, government, the Foreign Service, tourism, library services, teaching, professional translating, journalism, and all levels of education, including university teaching. Most foreign language careers require more than two years of study.

Certificate of completion - Spanish  
This certificate prepares students with an intermediate to advanced knowledge of Spanish and familiarizes them with the culture of Spain and Latin America.  
To earn a certificate of completion, students must complete each course used to meet a certificate requirement with a “C” grade or better.

 complet 13-15 units from the following list of courses:  units  
SPAN 110  Beginning Spanish for Business I  3
SPAN 111  Beginning Spanish for Business II  3
SPAN 112  Second Term Spanish  5
SPAN 120  First Term Spanish  5
SPAN 121  Second Term Spanish  5
SPAN 220  Third Term Spanish  5

Total units required  13-15

Certificate of completion – Spanish  complete 13-15 units from the following list of courses: units  
SPAN 110  Beginning Spanish for Business I  3
SPAN 111  Beginning Spanish for Business II  3
SPAN 112  Second Term Spanish  5
SPAN 120  First Term Spanish  5
SPAN 121  Second Term Spanish  5
SPAN 220  Third Term Spanish  5
SPAN 221  Fourth Term Spanish  5
SPAN 230  Fifth Term Spanish  5
SPAN 231  Sixth Term Spanish  5
SPAN 250  Contemporary Spanish and Latin American Literature  3

Total units required  13-15

SPAN-110  Beginning Spanish for Business  
3 units  SC  
54 hours lecture per term  
Introductory course designed to provide basic effective business communication skills in the Spanish language. The focus will be on career-specific vocabulary, providing functional oral and written language samples, as well as communicative practice through a defined grammatical syllabus. The topic of cultural practices in various Spanish-speaking countries as related to business will be included. CSU

SPAN-111  Beginning Spanish for Business II  
3 units  SC  
54 hours lecture per term  
Recommended: SPAN 110 or equivalent  
This second term course continues to provide effective business communication skills in the Spanish language. The focus will be on specialized vocabulary that business professionals need to communicate with Hispanic members of the community in the course of their daily work. Personalized questions, grammar exercises, role-play, reality based activities, as well as translation and interpretation tasks will be covered in this course. CSU

SPAN-120  First Term Spanish  
5 units  SC  
90 hours lecture / 18 hours laboratory by arrangement per term  
Note: SPAN 120 and 121 combined are equivalent in content to SPAN 145, 146 and 147 combined.  
This is a basic course in understanding, speaking, reading, and writing Spanish. It offers a balanced approach to a language and culture. Basic communicative functions and structures are introduced, as well as basic exploration of the culture and countries of the Spanish-speaking world. CAN SPAN 2, SPAN 120 + 121 = CAN SPAN SEQ A, CSU, UC (credit limits may apply to UC – see counselor)
SPAN-121  Second Term Spanish  
5 units  SC  
90 hours lecture / 18 hours laboratory by arrangement per term  
Recommended: SPAN 120 or equivalent  
This is a sequential course in Spanish, including the understanding, speaking, reading and writing of the language. A continuation of basic communicative structures and functions are introduced, as well as a continued examination of the culture of the Spanish-speaking world. Students will learn the preterit and imperfect tenses, compound tenses in the indicative mood, future and conditional tenses, as well as expanding their vocabulary. CAN SPAN 4, SPAN 120 + 121 = CAN SPAN SEQ A, CSU, UC (credit limits may apply to UC – see counselor)
Spanish

SPAN-231  Sixth Term Spanish
3 units  SC
54 hours lecture per term
Recommended: SPAN 230 or equivalent
This is an advanced Spanish language course emphasizing more complex reading, writing, listening, and speaking skills. The rich Hispanic heritage is explored through a wide range of materials including short stories, articles, poems, films, and documentaries. CSU, UC

SPAN-250  Contemporary Spanish and Latin-American Literature
3 units  SC
54 hours lecture per term
Recommended: SPAN 230 or equivalent
Analysis of literary works from contemporary Spanish and Latin-American writers, read in the original language. The class will be conducted entirely in Spanish. CSU, UC

SPAN-298  Independent Study
5-3 units  SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered
Selected students may pursue special studies in Spanish under the guidance of the foreign language faculty. CSU, UC (credit limits may apply to UC – see counselor)

Special education – SPEDU

Social Sciences Division
Lyn Krause, Dean
Faculty Office 134
925-685-1230 x 2518

Possible career opportunities
Students who earn a special education paraprofessional certificate of achievement are prepared for entry-level employment assisting students and individuals with disabilities in education and rehabilitation settings.

Associate in arts degree
Special education paraprofessional

Certificate of achievement
Special education paraprofessional

Associate in arts degree - Special education paraprofessional
The associate in arts degree in special education paraprofessional is designed as a two-year curricular pathway that offers students a broad general education while integrating an in-depth study of the skills and knowledge required to work with people with various disabilities in a variety of educational and related rehabilitation settings. The courses are intended to introduce students to career opportunities in special education or other disability related fields, and can provide preparation for transfer to four-year institutions to continue their course of study in general education and special education. Classes are designed to serve working individuals wishing to improve their applied skills and professional growth.

To earn a degree, students must complete each course used to meet a major requirement with a “C” grade or better. Required courses are available in the evening and during the day. Certain courses may satisfy both a major and a DVC general education requirement; however the units are only counted once. Students who intend to transfer to a four-year program in education/teacher preparation should consult with a counselor regarding specific requirements.

units
general education requirements ............................................27-38
major requirements
COOP 120  Occupational Work Experience
Education.................................................................2-4
ECE 124  Child Development and Psychology......................3
PSYCH 115  Resilience and Student Progress.....................1
PSYCH 122  Psychology in Modern Life............................3
SPEDU 101  Introduction to Disabilities............................3
SPEDU 102  Historical Perspectives of Disabilities and the Law .................................................................3
SPEDU 103  Pro-social Strategies for the Special
Education Paraprofessional........................................3

plus at least 6 units from:
ECE 126  Health, Safety and Nutrition for the Young
Child.................................................................3
ECE 128  Curriculum Development for the Young
Child.................................................................3
ECE 263  The Special Needs Child-Speech,
Language and Hearing.................................1
EDUC 120  Teaching as a Profession................................3
EDUC 122  Introduction to Reading Development and
Interventions for K-3............................................3
MATH 124  Mathematics for Liberal Arts........................3
MATH 125  Principles of Numbers................................3
SIGN 266  Sign Language: SEE I................................3
SIGN 267  Sign Language: SEE II................................3
SIGN 280  American Sign Language (ASL) I....................3
SIGN 281  American Sign Language (ASL) II..................3

Total units for the major 24-26
electives
units from a selection of degree applicable courses ........0-9
Total units for the degree 60

Certificate of achievement - Special education paraprofessional
This entry-level program prepares students with practical skills and knowledge to work with people with disabilities in a variety of educational and rehabilitation settings. Additionally, the
courses are intended to introduce students to career opportunities in special education or other disability related fields, and can provide preparation for transfer to four-year institutions to continue a course of study in general education and special education. Classes are designed to serve working individuals wishing to improve their applied skills and professional growth.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or better. Required courses are available in the evening and during the day.

required courses

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<td>Child Development and Psychology</td>
<td>3</td>
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<td>PSYCH 115</td>
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<tr>
<td>SIGN 281</td>
<td>American Sign Language (ASL) II</td>
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</tbody>
</table>

Total units required 24-26

SPEDI-101 SPEDI-101 Introduction to Disabilities

3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course will examine historical and cultural developments of disability issues, and compare international perspectives to understand the changing roles of people with disabilities. The legal and functional definitions of physical, communicative, sensory, psychological, neurological and developmental disabilities will be emphasized. Acquired versus congenital disabilities will be differentiated, and all forms of chronic/progressive illness will be explored. CSU

SPEDI-102 SPEDI-102 Historical Perspectives of Disabilities and the Law

3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course will examine the legal rights of the disabled, beginning with historical roots of the disability movement in the United States. Essential understanding of the earliest to current legislation governing access to education in federal, state, and local legal mandates will be emphasized. CSU

SPEDI-103 SPEDI-103 Prosocial Skills Strategies for the Special Education Paraprofessional

3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course explores the basic principles of pragmatic prosocial skills strategies used by the Special Education Paraprofessional within the educational workplace. Students will learn effective communication techniques to facilitate and manage appropriate student behavior and learning. CSU

Speech – SPCH

Applied and Fine Arts Division
Dean of Applied and Fine Arts
Humanities Building 112 and 113
925-685-1230 x 2312

Possible career opportunities

The scope of employment opportunities for speech majors includes: marketing, public relations, sales training and management. Careers related to speech communication that may require an undergraduate degree and/or further training include: salesperson, broadcaster, customer service representative, debate coach, disc jockey, hotel hospitality representative, speech teacher, lawyer, human resource recruiter, tour guide, political campaign worker, and public relations specialist.

SPCH-120 SPCH-120 Fundamentals of Speech

3 units SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
Students learn to prepare and present public speeches using the principles of effective communication. Emphasis is placed on speaking to inform, persuade, and special occasion speeches. Key principles learned include audience analysis, determining speech goals, organization, clarity, language, evidence, visual aids, and delivery. CAN SPCH 4, CSU, UC
SPCH-121  Persuasion and Critical Thinking
3 units  LR
54 hours lecture per term
Prerequisite: ENGL 122 or equivalent
An introduction to the principles of reasoning and their application to the analysis and evaluation of political and marketplace communication. Examines the structure of argument, underlying assumptions, the quality of evidence used to support claims, the use of language, the discovery of formal and informational fallacies, and the effect of print and electronic media on argumentation. This course emphasizes the integration of critical thinking principles with techniques of effective written and spoken argument. CSU, UC (credit limits may apply to UC – see counselor)

SPCH-123  Argumentation and Debate
3 units  LR
54 hours lecture per term
Recommended: eligibility for ENGL 122
The study and application of the principles of argumentation theory, including the analysis of propositions, issues, evidence, and reasoning, and applying them through critical thinking skills in debate. CAN SPCH 6, CSU, UC (credit limits may apply to UC – see counselor)

SPCH-124  Voice and Diction
3 units  SC
54 hours lecture per term
This course focuses on the improvement of vocal resonance, inflection, articulation, and quality through drills and exercises in oral communication. Intended for the general student in oral communication, as well as speech, drama, and education majors. CAN DRAM 6, CSU, UC

SPCH-128  Interpersonal Communication
3 units  SC
54 hours lecture per term
Recommended: eligibility for ENGL 122 or equivalent
This course applies the practical principles of interpersonal communication as it relates to our daily lives. Content will stress psychological, social, cultural, and linguistic factors which affect human interaction. Attention will be given to perception, interpersonal dynamics, listening, conflict resolution, relationship development and stages, and verbal and nonverbal communication. CAN SPCH 6, CSU

SPCH-130  Group Discussion
3 units  SC
54 Hours Lecture Per Term
A study of communication theory and research applied to working in small groups. Emphasis will be on individual communication behaviors and group practices that create successful group work. Skill development includes leadership, oral communication and team.

SPCH-140  Effective Listening
1 unit  CR/NC
18 hours lecture per term
Students learn to listen effectively and respond to messages. Listening for content and feeling are emphasized along with how to respond effectively. Learning activities include listening activities, role-play, and class discussion. CSU

SPCH-148  Performance of Literature
3 units  SC
54 hours lecture per term
Recommended: eligibility for ENGL 122
Note: formerly SPCH-150
This course develops, through analysis and oral performance, an appreciation for the skill of interpreting literature (prose, drama, poetry and a combination of all these mediums). Students will also evaluate performances. CSU, UC

SPCH-155  Topics in Speech
3-4 units  SC
May be repeated three times
Variable hours
Recommended: eligibility for ENGL 122 or equivalent
A supplemental course in speech communication designed to develop oral communication skills in specialized areas of interaction such as conference leading, conflict resolution, job interviewing, listening, and business presentations. Specific topics will be announced in the schedule of courses. CSU

SPCH-160  Projects in Public Speaking
1 unit  SC
May be repeated three times
54 hours lecture per term
Recommended: eligibility for ENGL 122
Participation in public speaking events which include persuasive speaking, informative speaking, impromptu speaking, extemporaneous speaking, communication analysis and speeches to entertain for the college’s intercollegiate speech team. The team travels to tournaments in northern California and/or prepares speeches to present to local community groups. CSU

SPCH-161  Projects in Debate
1 unit  SC
May be repeated three times
54 hours lecture per term
Recommended: eligibility for ENGL 122
Participation in debate for the college’s intercollegiate speech team that travels to tournaments in northern California and/or prepares debates to present to local community groups. CSU

SPCH-162  Projects in Oral Interpretation
1 unit  SC
May be repeated three times
54 hours lecture per term
Recommended: eligibility for ENGL 122
Participation in speaking projects which include oral interpretation, prose, poetry, dramatic interpretation, duo interpretation.

ARCHIVED
and Reader’s Theater for the college’s intercollegiate speech team. The team travels to tournaments in northern California and/or prepares oral readings to present to local community groups. CSU

**SPCH-298 Independent Study**

.5-3 units  SC
May be repeated three times
Variable hours
Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered
An opportunity for advanced students to pursue special studies in communication under the direction of faculty. CSU, UC (credit limits may apply to UC – see counselor)

**Sports medicine/athletic training**

See Physical Education Theory - PETHE

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**Steamfitting – STMFT**

Physical Sciences and Engineering Division
Dennis Smith, Dean
Physical Sciences Building 261
925-685-1230 x 2359

**STMFT-150 Topics in Steamfitting**

.3-4 units  SC
May be repeated three times
Variable hours
A supplemental course in Steamfitting to provide a study of current concepts and problems in Steamfitting and related subdivisions. Specific topics will be announced in the schedule of courses.

**STMFT-151 Related Training in Steamfitting**

2 units  LR
18 hours lecture / 36 hours laboratory per term
Recommended: registered as an apprentice in the steamfitting trade with the ability to profit from the instruction; must be taken in sequence
Related technical instruction, supplementary to the apprentice’s on-the-job training, beginning with knowledge of the trade, safety, related math, and basic processes and progressing through eight terms of related instruction.

**STMFT-152 Related Training in Steamfitting**

2 units  LR
18 hours lecture / 36 hours laboratory per term
Recommended: registered as an apprentice in the steamfitting trade with the ability to profit from the instruction; must be taken in sequence
Related technical instruction, supplementary to the apprentice’s on-the-job training, beginning with knowledge of the trade, safety, related math, and basic processes and progressing through eight terms of related instruction.

**STMFT-153 Related Training in Steamfitting**

2 units  LR
18 hours lecture / 36 hours laboratory per term
Recommended: registered as an apprentice in the steamfitting trade with the ability to profit from the instruction; must be taken in sequence
Related technical instruction, supplementary to the apprentice’s on-the-job training, beginning with knowledge of the trade, safety, related math, and basic processes and progressing through eight terms of related instruction.

**STMFT-154 Related Training in Steamfitting**

2 units  LR
18 hours lecture / 36 hours laboratory per term
Recommended: registered as an apprentice in the steamfitting trade with the ability to profit from the instruction; must be taken in sequence
Related technical instruction, supplementary to the apprentice’s on-the-job training, beginning with knowledge of the trade, safety, related math, and basic processes and progressing through eight terms of related instruction.

**STMFT-155 Related Training in Steamfitting**

2 units  LR
18 hours lecture / 36 hours laboratory per term
Recommended: registered as an apprentice in the steamfitting trade with the ability to profit from the instruction; must be taken in sequence
Related technical instruction, supplementary to the apprentice’s on-the-job training, beginning with knowledge of the trade, safety, related math, and basic processes and progressing through eight terms of related instruction.

**STMFT-250 Related Training in Steamfitting**

2 units  LR
18 hours lecture / 36 hours laboratory per term
Recommended: registered as an apprentice in the steamfitting trade with the ability to profit from the instruction; must be taken in sequence
Related technical instruction, supplementary to the apprentice’s on-the-job training, beginning with knowledge of the trade, safety, related math, and basic processes and progressing through eight terms of related instruction.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Lecture/Laboratory</th>
<th>Recommended</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>STMFT-250</td>
<td>Related Training in Steamfitting</td>
<td>2</td>
<td>LR 18h lab/36h lab</td>
<td>must be taken in sequence</td>
<td>Related technical instruction, supplementary to the apprentice’s on-the-job training, beginning with knowledge of the trade, safety, related math, and basic processes and progressing through eight terms of related instruction.</td>
</tr>
<tr>
<td>STMFT-251</td>
<td>Related Training in Steamfitting</td>
<td>2</td>
<td>LR 18h lab/36h lab</td>
<td>must be taken in sequence</td>
<td>Related technical instruction, supplementary to the apprentice’s on-the-job training, beginning with knowledge of the trade, safety, related math, and basic processes and progressing through eight terms of related instruction.</td>
</tr>
<tr>
<td>STMFT-252</td>
<td>Related Training in Steamfitting</td>
<td>2</td>
<td>LR 18h lab/36h lab</td>
<td>must be taken in sequence</td>
<td>Related technical instruction, supplementary to the apprentice’s on-the-job training, beginning with knowledge of the trade, safety, related math, and basic processes and progressing through eight terms of related instruction.</td>
</tr>
<tr>
<td>STMFT-253</td>
<td>Related Training in Steamfitting</td>
<td>2</td>
<td>LR 18h lab/36h lab</td>
<td>must be taken in sequence</td>
<td>Related technical instruction, supplementary to the apprentice’s on-the-job training, beginning with knowledge of the trade, safety, related math, and basic processes and progressing through eight terms of related instruction.</td>
</tr>
<tr>
<td>STMFT-254</td>
<td>Related Training in Steamfitting</td>
<td>2</td>
<td>LR 18h lab/36h lab</td>
<td>must be taken in sequence</td>
<td>Related technical instruction, supplementary to the apprentice’s on-the-job training, beginning with knowledge of the trade, safety, related math, and basic processes and progressing through eight terms of related instruction.</td>
</tr>
<tr>
<td>STMFT-255</td>
<td>Related Training in Steamfitting</td>
<td>2</td>
<td>LR 18h lab/36h lab</td>
<td>must be taken in sequence</td>
<td>Related technical instruction, supplementary to the apprentice’s on-the-job training, beginning with knowledge of the trade, safety, related math, and basic processes and progressing through eight terms of related instruction.</td>
</tr>
<tr>
<td>STMFT-256</td>
<td>Related Training in Steamfitting</td>
<td>2</td>
<td>LR 18h lab/36h lab</td>
<td>must be taken in sequence</td>
<td>Related technical instruction, supplementary to the apprentice’s on-the-job training, beginning with knowledge of the trade, safety, related math, and basic processes and progressing through eight terms of related instruction.</td>
</tr>
</tbody>
</table>
STMFT-267 Related Training in Steamfitting
2 units LR
18 hours lecture / 36 hours laboratory per term
Recommended: registered as an apprentice in the steamfitting trade with the ability to profit from the instruction; must be taken in sequence
Related technical instruction, supplementary to the apprentice’s on-the-job training, beginning with knowledge of the trade, safety, related mathematics and basic processes and progressing through eight terms of related instruction.

STMFT-270 Related Training in Steamfitting
1 unit LR
18 hours lecture / 36 hours laboratory per term
Recommended: registered as an apprentice in the steamfitting trade with the ability to profit from the instruction
Related technical instruction, supplementary to the apprentice’s on-the-job training.

STMFT-271 Related Training in Steamfitting
1 unit LR
18 hours lecture / 36 hours laboratory per term
Recommended: registered as an apprentice in the steamfitting trade with the ability to profit from the instruction
Related technical instruction, supplementary to the apprentice’s on-the-job training.

STMFT-272 Related Training in Steamfitting
1 unit LR
18 hours lecture / 36 hours laboratory per term
Recommended: registered as an apprentice in the steamfitting trade with the ability to profit from the instruction
Related technical instruction, supplementary to the apprentice’s on-the-job training.

STMFT-273 Related Training in Steamfitting
1 unit LR
18 hours lecture / 36 hours laboratory per term
Recommended: registered as an apprentice in the steamfitting trade with the ability to profit from the instruction
Related technical instruction, supplementary to the apprentice’s on-the-job training.

STMFT-274 Related Training in Steamfitting
1 unit LR
18 hours lecture / 36 hours laboratory per term
Recommended: registered as an apprentice in the steamfitting trade with the ability to profit from the instruction
Related technical instruction, supplementary to the apprentice’s on-the-job training.

STMFT-275 Related Training in Steamfitting
1 unit LR
18 hours lecture / 36 hours laboratory per term
Recommended: registered as an apprentice in the steamfitting trade with the ability to profit from the instruction
Related technical instruction, supplementary to the apprentice’s on-the-job training.

STMFT-276 Related Training in Steamfitting
1 unit LR
18 hours lecture / 36 hours laboratory per term
Recommended: registered as an apprentice in the steamfitting trade with the ability to profit from the instruction
Related technical instruction, supplementary to the apprentice’s on-the-job training.

STMFT-277 Related Training in Steamfitting
1 unit LR
18 hours lecture / 36 hours laboratory per term
Recommended: registered as an apprentice in the steamfitting trade with the ability to profit from the instruction
Related technical instruction, supplementary to the apprentice’s on-the-job training.

STMFT-278 Related Training in Steamfitting
1 unit LR
18 hours lecture / 36 hours laboratory per term
Recommended: registered as an apprentice in the steamfitting trade with the ability to profit from the instruction
Related technical instruction, supplementary to the apprentice’s on-the-job training.

STMFT-279 Related Training in Steamfitting
1 unit LR
18 hours lecture / 36 hours laboratory per term
Recommended: registered as an apprentice in the steamfitting trade with the ability to profit from the instruction
Related technical instruction, supplementary to the apprentice’s on-the-job training.

Supervised tutoring – SPTUT

Library and Learning Resources Division
Ann Patterson, Dean
Library Building 219
925-685-1230 x 2237

Diablo Valley College’s supervised tutoring course is a free, noncredit, zero-unit course that enables students who are referred by an instructor or counselor to receive tutoring assistance. Tutoring, provided by student tutors, can help with course work, homework, exam preparation or grade improvement. All students benefit from tutorial services that strengthen their basic computational and algebra skills, basic writing, reading, language and critical thinking skills.
Supervised tutoring

**SPTUT-20  Supplemental Instruction**

<table>
<thead>
<tr>
<th>0 unit</th>
<th>Not degree applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 hour lecture per week</td>
<td>Note: this is a non-credit course</td>
</tr>
</tbody>
</table>

Individualized tutoring designed to assist students to increase their success in college. A student may enroll for support of more than one college course per semester. Content will vary depending on the course subject matter. Attention will be given to the course subject matter for the student to successfully complete the course requirements. The student must be enrolled in a college credit course and be referred by an instructor or counselor.

**Tagalog – TAGLG**

Students with prior foreign language instruction should check with a language teacher regarding their proper placement in foreign language courses. The following system is generally used to determine the appropriate term of college work based on high school language: two years equal one college term; three years equal two college terms; four years equal three college terms.

Applied and Fine Arts Division
Dean of Applied and Fine Arts
Humanities Building 112 and 113
925-685-1230 x 2312

**TAGLG-150  Topics in Tagalog**

<table>
<thead>
<tr>
<th>3-4 units</th>
<th>SC</th>
</tr>
</thead>
<tbody>
<tr>
<td>May be repeated three times</td>
<td>Variable hours</td>
</tr>
</tbody>
</table>

A supplemental course in Tagalog to provide a study of current concepts and problems in Tagalog and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

**TAGLG-155  First Term Conversational Tagalog**

<table>
<thead>
<tr>
<th>3 units</th>
<th>SC</th>
</tr>
</thead>
<tbody>
<tr>
<td>May be repeated once</td>
<td>54 hours lecture per term</td>
</tr>
</tbody>
</table>

This is an introductory course in basic Tagalog conversation utilizing practical material with oral-aural practice based on this material. CSU

**TAGLG-156  Second Term Conversational Tagalog**

<table>
<thead>
<tr>
<th>3 units</th>
<th>SC</th>
</tr>
</thead>
<tbody>
<tr>
<td>May be repeated once</td>
<td>54 hours lecture per term</td>
</tr>
<tr>
<td>Recommended: TAGLG 155 or equivalent</td>
<td></td>
</tr>
</tbody>
</table>

This course is a continuation of Tagalog 155. Basic skills are expanded to include a wide range of vocabulary and more complicated conversational structure. CSU

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**Transfer studies – CSU**

The transfer studies –CSU major is designed for students planning to transfer to the California State University system.

This degree offers students a program of study which meets the CSU general education requirements as well as the DVC general education requirements for the associate degree. Many courses satisfy both a CSU and DVC general education requirement; however, the units are only counted once towards the 60 unit degree requirement for the associate degree.

Although the associate degree recognizes the completion of lower division CSU general education requirements, it does not guarantee admission to a specific campus in the CSU nor does it guarantee admission to a specific major. Some majors and colleges may require different lower division preparation and/or a higher GPA than is necessary for the associate degree.

Students who intend to transfer must meet all current CSU transfer requirements including minimum GPA and eligibility for certification. Students are strongly advised to meet with a counselor to discuss transfer requirements and lower division major preparation that is needed for their intended transfer school. (Also see CSU GE transfer information in this catalog.)

**Notes:** a student may be awarded an associate degree in this major without being fully eligible for transfer.

<table>
<thead>
<tr>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>from required courses for the major (CSU GE pattern)</td>
</tr>
<tr>
<td>from DVC general education and degree applicable coursework</td>
</tr>
<tr>
<td>electives</td>
</tr>
</tbody>
</table>

**Total minimum units for the degree 60**

---

**Transfer studies – IGETC**

The transfer studies –IGETC major is designed for students planning to transfer to University of California or California State University campuses.

This degree offers students a program of study which meets IGETC requirements as well as the DVC general education requirements for the associate degree. Many courses satisfy both IGETC and DVC general education requirements; however, the units are only counted once towards the 60 unit requirement for the associate degree.

Although the associate degree recognizes the completion of lower division IGETC requirements, it does not guarantee admission to a specific campus or school in the CSU or UC systems nor does it guarantee admission to a specific major. Some majors and colleges require different lower division preparation and/or a higher GPA than is necessary for the associate degree.
Students who intend to transfer must meet all current IGETC transfer requirements such as minimum GPA and eligibility for certification. Students are strongly advised to meet with a counselor to discuss transfer requirements and the lower division major preparation that is needed for their intended transfer school. (Also see IGETC Transfer Information in this catalog.)

Note: a student may be awarded an associate degree in this major without being fully eligible for transfer.

<table>
<thead>
<tr>
<th>required courses for the major (IGETC pattern)</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DVC general education an degree applicable coursework</td>
<td>34-41</td>
</tr>
</tbody>
</table>

| electives | 6-32 |

**Total minimum units for the degree 60**

Note: students intending to transfer to the CSU system are advised that an additional six units of study are required for the American Institutions requirement.

### Women’s services

Social Sciences Division  
Lyn Krause, Dean  
Faculty Office 134  
925-685-1230 x 2518

#### Certificate of achievement - Women’s services

This program prepares students to volunteer or find paraprofessional employment with groups, agencies, and programs that focus on the needs of women. Some of the courses may transfer to four-year institutions or may be applied toward general education requirements. This certificate prepares students to pursue degrees in social welfare, social services, sociology, psychology, or social science.

To earn a certificate of achievement, students must complete each of the courses used to meet a certificate requirement with a “C” grade or better. Certificate requirements can be completed by attending in the day, the evening, or both.

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
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<tbody>
<tr>
<td>HSCI 170 Women’s Health</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 160 Psychology of Women</td>
<td>3</td>
</tr>
<tr>
<td>SOCSC 220 Women in United States Society</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>plus at least 9 units from:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 101 Introduction to Substance Abuse and Treatment</td>
<td>3</td>
</tr>
<tr>
<td>ADS 155 Diverse Communities and Social Services</td>
<td>3</td>
</tr>
<tr>
<td>ADS 170 Introduction to Codependency and Family Issues</td>
<td>3</td>
</tr>
<tr>
<td>ECE 124 Child Development and Psychology</td>
<td>3</td>
</tr>
<tr>
<td>ECE 134 Family Communication and Interaction</td>
<td>1-3</td>
</tr>
<tr>
<td>ECE 150 Topics in Child Development</td>
<td>1-3</td>
</tr>
<tr>
<td>HSCI 140 Human Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 220 Women in United States Society</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO 120 Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO 125 Introduction to Marriage and Family</td>
<td>3</td>
</tr>
<tr>
<td>SOCSC 120 Women and Social Change in the U.S.: 1890-Present</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>plus at least 9 units from:</th>
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<tbody>
<tr>
<td>BUSIM 075 Business Training Workshop</td>
<td>0.5-1</td>
</tr>
<tr>
<td>BUSIM 110 Keyboarding I-Beginning Keyboarding</td>
<td>3</td>
</tr>
<tr>
<td>CIS 050-099 Various computer applications</td>
<td>0.3-4</td>
</tr>
<tr>
<td>COMSC 100L Introduction to Computer Software</td>
<td>1</td>
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</table>

<table>
<thead>
<tr>
<th>plus at least 3 units from one of:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>CARDV 130 Careers in Social Service</td>
<td>1-3</td>
</tr>
<tr>
<td>COOP 170 Occupational Work Experience</td>
<td>1-4</td>
</tr>
</tbody>
</table>

**Total units required 24**

### Work experience

See Cooperative Education - COOP
"I never thought of myself as college material, so the thought of having a degree seemed unattainable. But when I found myself in the position of being a single parent, I knew I had to improve my skills to support my three kids. The DVC Financial Aid Office and student services were absolutely essential to my success and perseverance as a student. Without the support of the individuals who guided my progress, I would not have completed college, and I wouldn’t have the privilege of now guiding other students in their vocational journeys."

Sue Arnett

Sue graduated fall ’04 from CSU Hayward and is now working as an Employment Development Specialist.
Faculty and academic administrators

Faculty....................................................................................................................... 258
Emeriti .......................................................................................................................... 265
Index............................................................................................................................ 267
Telephone directory...................................................................................................... 270
DVC campuses and centers.......................................................................................... 271
DVC campus map.......................................................................................................... 272
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Department</th>
<th>B.A. or M.A. 1</th>
<th>M.A. or Ph.D. 1</th>
<th>College or University</th>
</tr>
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<tbody>
<tr>
<td>Abajian, Kathryn</td>
<td>faculty - English</td>
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<td></td>
<td>B.A. - Brigham Young</td>
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<td>M.A. - San Francisco State University</td>
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<tr>
<td>Abbott, Daniel</td>
<td>faculty - architecture</td>
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<td>B.A. - University of Oregon</td>
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<tr>
<td>Aguallo, Lillian</td>
<td>counselor, faculty - psychology</td>
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<td>B.A., M.A. - Sonoma State University</td>
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<tr>
<td>Akanyirige, Emmanuel</td>
<td>faculty - math</td>
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<td>B.S. - Ball State University</td>
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<tr>
<td>Akiyama, Mark</td>
<td>faculty - psychology</td>
<td></td>
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<td>B.A. - UC Berkeley</td>
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<tr>
<td>Almajuer, Michael</td>
<td>faculty - art</td>
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<td>M.F.A. - San Francisco Art Institute</td>
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<tr>
<td>Appell, Glenn</td>
<td>faculty - music</td>
<td></td>
<td></td>
<td></td>
<td>B.A. - Hunter College, New York</td>
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<tr>
<td>Armstrong, Terry L.</td>
<td>dean of counseling and student support services</td>
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<td>B.A., M.A. - CSU Fresno</td>
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<tr>
<td>Avanessian, Garen</td>
<td>faculty - engineering</td>
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<td>B.S. - Pahlavi University, Iran</td>
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<td>M.S., Ph.D. - University of Wales, UK</td>
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<td>M.S. - San Jose State University</td>
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<tr>
<td>Bach, Daniel J.</td>
<td>faculty - mathematics</td>
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<tr>
<td>Bairos, Monte</td>
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<td>A.A. - Merced College</td>
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<td>B.A. - CSU Stanislaus</td>
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<td>M.M. - University of Colorado, Boulder</td>
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<tr>
<td>Bales, Rebecca</td>
<td>faculty - history</td>
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<td>B.A. - UC Santa Cruz</td>
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<td>M.A. - University of Colorado</td>
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<td>Ph.D. - Arizona State University</td>
</tr>
<tr>
<td>Barber, Thomas P.</td>
<td>faculty - English</td>
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<td>B.A. - St. Mary's College</td>
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<tr>
<td>Barlow, Andrew L.</td>
<td>faculty - social sciences</td>
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<td>B.A. - Oberlin College</td>
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<td>M.A., Ph.D. - Harvard University</td>
</tr>
<tr>
<td>Barneson, Linda J.</td>
<td>faculty - physical education</td>
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<td>B.S. - CSU Hayward</td>
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<td>M.A. - University of Minnesota</td>
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<td>M.Ed. - University of La Verne</td>
</tr>
<tr>
<td>Bernhardt, Paul J.</td>
<td>faculty - hotel and restaurant management</td>
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<td>B.V.E SF State University</td>
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Koller, Bruce  
faculty - economics  
A.A. - College of San Mateo  
B.S. - San Jose State University  
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Kow, Helen L.  
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McCade, Karl  
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Messenger, Mark D.  
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M.F.A. - CSU San Diego

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faculty - nutrition and health science  
B.S. - UC Davis  
M.S., M.P.H. - UC Berkeley  
Registered Dietitian

Mikolavich, Daniel Keith  
faculty - English  
B.A., M.A. - San Francisco State Univ.
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<td>executive dean information technology and services</td>
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<td>B.A., M.A., Ph.D. - Patna University, India</td>
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<td>Sinsel, John D.</td>
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<td>Sison, Darlene Ruth</td>
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<td>Smith, Dennis</td>
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<td>Smith, E. Diane</td>
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<td>Smith, Jenny</td>
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<td>Sporer, Rene</td>
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<td>Stallings, Kenley W.</td>
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<td>counselor - EOPS/CARE</td>
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<td>Symonds, Joan M. L.</td>
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<td>Thomas, Catherine T.</td>
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<td>B.S. - University of Maryland</td>
<td>Tech.Ed., Ph.D. - University of Akron</td>
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<td>Trujillo-Holman, Sandra</td>
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<td>B.A. - College of Notre Dame of Maryland, M.A. - Creighton University</td>
</tr>
</tbody>
</table>
Emeriti

Abbott, Leslie K. .......... drama
Adams, Chambers D. ............ foreign language
Ardini, James M. .......... physical science
Ashby, Denise S. .......... speech
Atkins, Donna R. .......... English
Bacich, John .......... English
Baggett, Harry W., JR .......... business education
Barnickle, Stanley .......... counseling
Beeton, Carole Ann E. .......... physical education
Benes, Helen D. .......... reference librarian
Berger, Phyllis .......... philosophy
Berman, Harvey .......... speech, drama
Bernard, Ronald C. .......... business education
Beutel, Orville R. .......... machine technology
Birdsall, Les .......... dean of math and computer science
Blossom, Charles B .......... music
Bosmans, Pierre C. .......... hotel and restaurant management
Bown, Ben B. .......... mathematics
Bronzan, Jo Ann P. .......... physical education
Brooks, Stephen A. .......... physical science
Bruckmeier, Kenneth E. .......... music
Brunner, Donald .......... physical science
Bryan, Gaylord .......... physical education
Bryan, Nancy L. .......... physical education
Buffa, Harold .......... physical education
Byrne, Harry M. .......... biological science
Calhoun, Willard E. .......... counselor
Carter, C. Patrick .......... counselor
Cecaci, Ernest .......... physical education
Chambers, John W. .......... business education
Chaplin, Leonard .......... physical education
Christenson, Marilyn T .......... counselor/articulation
Clare, Charles J. .......... mathematics
Collins, Philip R. .......... physical science
Cooper, Richard E. .......... engineering
Costa, James A. .......... physical education
Cottam, Grant E. .......... construction technology
Cottril, Charles L .......... biological science
Crooks, Thomas .......... mathematics
Cross, Jerry .......... psychology
Custodio, Vincent R. .......... counselor
Daley, James .......... psychology
Dantziel, Robert N. .......... English
Davis, Charles W. .......... music
Dennis, Charles W. .......... architecture
De Vito, Sam J. .......... physical education
Dickinson, Donald H. .......... biological science
Dowling, Philip M. .......... biological science
Dravland, John D. .......... social science
Dudley, Richard E. .......... social science
Dull, Arthur P. .......... mathematics
Dunlap, Elaine .......... humanities
Dunn, Natali .......... English
Duvall, Vernon L. .......... chemistry
Eastman, Mark D. .......... psychology
Eddy, Lorraine S. .......... history
Ericson, Robert W. .......... physical education
Evans, Bert L. .......... electronics
Flanagan, Robert .......... chemistry
Flynn, Douglas M. .......... chemistry
Foster, Donald E. .......... business
Fowler, Ralph G. .......... social science
Garabedian, Evelyn D. .......... English
Garcia, Sharon Abbott .......... health science
Gilbert, Patricia .......... mathematics
Glover, David A. .......... mathematics
Goselin, Eugene R. .......... biological science
Green, Geri J. .......... counselor
Green, Kendal H. .......... engineering
Grotto, Alice F. .......... business education
Guertin, Raouli J. .......... foreign language
Gustafson, Clair H. .......... English
Hall, Rose Mary .......... social science
Hambelton, Robert G. .......... speech, television
Hammill, Jim .......... computer science
Harlan, William K. .......... director, San Ramon Valley Campus
Harelson, Anna M. .......... counselor/psychology
Hatch, Leslie .......... counselor/psychology
Hendrickson, Robert .......... electronics
Hodgson, Robert S. .......... art
Heuga, Pascal R. .......... English
Holmoe, Robert .......... administration of justice
Horner, Virginia .......... mathematics
Howe, Phyllis S. .......... nutrition
Hurley, Gerard T. .......... film
Jansen, James .......... English
Jansens, Luc .......... foreign language
Johnson, Carol H. .......... economics
Johnson, David A. .......... machine technology
Johnson, Fredric B. .......... music
Johnson, Virginia .......... mathematics
Jefcoat, L. Allure .......... health science
Jones, Bob L. .......... psychology
Jones, Gerald A. .......... physical education
Kattan, Diana .......... biological science
Kamprath, Richard .......... music
Karp, Charles .......... health science
Kirkwood, James D. .......... speech, drama
Kirschbaum, Lynda .......... computer information systems
Lamka, Donald S. .......... history
Lasky, Marge .......... history
La San, Frank .......... counselor
Lee, Michael .......... tv/film
Ligon, Shirley A. .......... English
Long, Anne H. .......... disabled student services
Lopez, Michael .......... art
Macgregor, Sherry Lou .......... humanities
MacMichael, Lynn .......... humanities
Mah, Theodore M.Q. .......... business
Mahan, E. Don .......... English
Mannberg, Robert L .......... social sciences
Martin, Kaye H. .......... astronomy
McCrary, Delores .......... EOPS Director
McCune, Evelyn B. .......... social science
McDowell, Clinton T .......... electronics
McGlibery, Colin R .......... architecture
McKinney Brian C. .......... English
McKowen, Clark .......... English
McVicar, Janet C .......... apparel design
<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Department</th>
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</table>

**President Emerita**

Peterson, Phyllis          1984-96
Index

A
A.A./A.S. degrees (see associate degree)
Academic dishonesty 31
Academic dismissal 37
Academic honors 35
Academic policy 31
Academic probation 36
Academic renewal 36
Accounting 101
Addiction studies 75
Adding (or dropping courses) 18, 32
Administration of justice 79
Admission 12
Advanced placement 33
Advising 12
Alternative energy technology 83
Alternatives to course credit 32
Anthropology 83
Appeals 36
Applications, admission 12
Apprenticeship 29
Architecture 86
Arabic 85
Art 87
Art Gallery 28
Art history 91
ASDVC 27
Assessment 12
Assessment center 19
Associate degree 34, 35, 63
Associated student body photo identification card 14
Associated Students (ASDVC) 25, 27
Astronomy 92
Athletics 27
Auditing courses 32

B
Basic skills 9, 26
Biological science 93
Board of Governors waiver 15
Book Center 20
Books and supplies 14
Broadcast communication arts 96
Business 99
Credit by exam 29, 34, 67
Credit/no credit (CR/NC) grades 35
CSU admission 26, 54
CSU general education requirements 54
CSU Hayward, CSU East Bay, Concord Campus 11
Culinary arts 128
Cultural activities 27

C
Cal Grant 16
California residence status 13
CalWORKs program 21
Campus security act 42
CARE 23
Career and employment services center 21
Career development 111
Career pathways 29
Catering 23, 24
Certificate programs 68
Chemistry 142
Child care 22
Child Development Training Consortium 17
Chinese 113
CLEP 33
Clubs 25, 27
Code of conduct 31, 37, 42
Colloquia 114
College for Kids 29
Community resources 28
Complaint procedures 39
Computer Center 22
Computer information systems 114
Computer network technology 115
Computer science 117
Computer technical support 122
Concurrent enrollment 19
Connect Card 14, 22
Construction 124
Continuing students 18
Cooperative Agencies Resource for Education (CARE) 23
Cooperative education 126
Cooperative work experience education 21, 134
Costs 14
Counseling 12, 18, 22, 127
Course descriptions 73
Course materials fees 14
Course prerequisites 32, 33, 38
Course repetition 36
Course substitution policy 37

D
Dance 28, 225
Debts, student 15
Dental assisting 132
Dental hygiene 135
Dental laboratory technology 140
Disability support services 22
Disciplinary procedures 43
Dismissal 36, 37
Drafting 155
Drama 28, 142
Dropping courses 18, 19
Drug free campus 37
DVC Connect Card 14, 22

E
Early childhood education 144
Economic development 9
Economics 152
Education 153
Educational Talent Search 29
Electricity 153
Electronics 153
Eligibility for admissions 13
Emergency services 23
Emeritus college 29  
Employment services 21  
Engineering and engineering technology 155  
English 162  
English as a second language 23, 160  
Enrollment fees 14  
EOPS 23  
Equal opportunity policy 38  
ESL 23, 160  
Evening escorts 23  
Evening programs 10  
Exemptions from assessment 12  
Extended Opportunities Programs and Services (EOPS) 23  
Extracurricular activities 27  

Faculty 258  
Faculty commitment to students 10  
Fairness in grading 36  
Family life education (see Early childhood education)  
Federal loans 16  
Federal PELL Grant 16  
Federal Supplemental Educational Opportunity Grant (FSEOG) 16  
Fees 15  
Field studies 167  
Field trip fees 14  
Field trips 14, 31  
Film 167-170  
Financial aid 15  
Food services 23  
Freedom of expression policy 38  
French 170  
Full-time status 32  

General education requirements, associate degrees 87  
General education requirements, CSU 54  
General education transfer curriculum, intersegmental (IGETC) 57  
Geography 171  
Geology 174  
German 175  
Gerontology 177  
Grade changes, corrections, student appeals 36, 40  
Grade policy 35  
Graduation honors 35  
Grants, student 15  
Grievance procedures 38  

Health Science 177  
High school concurrent enrollment 19  
History 179  
History, district and college 8  
Honors 34  
Horticulture 181  
Hotel and restaurant management (HRM) (see culinary arts)  
Housing services 24  
Humanities 187  
Hybrid courses 11  

IGETC 57-59  
Improving a GPA 36  
Incomplete grades 35  
Independent study courses 32  
Information Center 24  
Inquirer 27  
Instructional material policy 38  
Instructors’ rights policy 38  
Intercollegiate sports 27, 227  
International students 13, 24  
Italian 188  

Japanese 190  
Job placement 21  
Journalism 191  

Late add codes 19  
Latin 192  
Learning skills 193  
Learning communities 30  
Leave of absence 31  
Liberal arts 194  
Library information technology 194  

Library services 24  
Library studies 194  
Linked classes 30  
Loans 16  

Machine technology 197  
Management 106  
Marketing 108  
Math lab 26  
Mathematics 182  
Matriculation 11, 35  
Media center  
Medical insurance, student 15  
Military service credit 35  
Multimedia 202  
Music 206  
Music literature 212  
Music performances 213-  
Newspaper 27  
Non credit courses 36  
Non-residence status 13  
Non-resident fees 14  
Norseman Restaurant 23  
Nutrition 215  

Oceanography 217  
Observatory 28  
Online registration 19  
Open course policy 36  
Orientation 12  
Outreach office 24  

268 Diablo Valley College Catalog 2006-2007 • Index
P
Parking fees and policy  14
PELL Grant, federal 16
Peer Support Center 24
Persian 217
Philosophy 217
Philosophy of DVC 8
Photography 219
Physical education 219
Physical science 234
Physics 235
Planetarium 28
Plumbing 236
Political science 238
Portuguese 239
Prerequisites 32
Privacy rights 42
Probation, progress 36
Programs, an overview 10
Psychology 239
Puente program 30

R
Re-admission 37
Real estate 240
Records 20
Refunds 14
Registration appointments 18
Registration, online/telephone/
    walk-in 18
Remedial unit limit 32
Repeating courses 32
Residence status 13
Respiratory therapy 240
Returning student 18
Right-to-know policy, student 42
ROTC 30
Russian 241

S
San Ramon Valley Campus 11
Schedule of courses 15
Scholarships 17
Servicemen’s benefits 17
Sexual harassment policy 39
Shared governance 10
Short-term courses (dropping) 19
Sign language 242-243
Small business management 106
Smoking policy 40
Social science 243
Sociology 244
Spanish 246
Special admit students 19
Speech 249
Sports medicine/athletic training (see
    Physical education)
SRVC Student Services 25
Steamfitting 251
Student appeals for grade changes
    40
Student choice (SC) grades 35
Student code of conduct 42
Student grievance policy 42
Student government 27
Student leadership 26
Student life 25
Student privacy rights 42
Student records 20
Student resources 20
Student responsibilities-
    matriculation 38
Student right-to-know and campus
    security act 42
Student rights-matriculation 38
Student union, fees 15
Student union 25
Study abroad 30
Substitute courses 33
Summer Institute, EOPS 23
Summer programs 11
Supplies fees 14

T
Tagalog 254
Telephone registration 15, 19
Term unit limit 32
Theater productions 28
Ticket office 28
Transcripts 13
Transfers 9, 26, 51
Transfer Center 26
Transfer studies 254
Transfer to CSU 51
Transfer to DVC 13
Transfer to UC 52
Tuition 14
Tutoring services 25, 253

U
UC - Admission requirements 52
UC - Transfer 52
UC - Transfer admission agreements
    52
Ujima 30
Unit limits 19

V
Variable-unit courses 32
Veteran’s benefits 17
Vocational rehabilitation aid 18
Volunteer Services 22

W
Walnut Creek Center 11
Weekend programs 10
Withdrawal 19
Women’s Resource Services 26
Women’s services 26, 255
WorkAbility III program 22
Workforce Development 9
Work-Study 16
### Telephone directory

Students may call DVC or SRVC by dialing the appropriate “General Number” and an extension.

If using a touch-tone phone, when the call has been answered, enter the extension number of your choice or stay on the line for further assistance.

If using a rotary phone, when the call has been answered, wait for the operator.

On-campus emergency: **2333** or call **9-911** from any telephone.

#### DVC general number    (925) 685-1230

<table>
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<td>DVC Campus</td>
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<tr>
<td>Admissions Office</td>
<td>(925) 685-1310</td>
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<td>Fax</td>
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<td>Assessment Center</td>
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<td>Book Center</td>
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<td>International Student Admission and Services...</td>
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<td>Lost and Found</td>
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<td>Media Center (self-instruction lab)</td>
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<td>Study Abroad Program email: <a href="mailto:studyabroad@dvc.edu">studyabroad@dvc.edu</a></td>
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<tr>
<td>Telephone Registration</td>
<td>(925) 370-9000</td>
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<tr>
<td>Ticket Office</td>
<td>2357/ (925) 687-4445</td>
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#### San Ramon Valley Campus

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<tbody>
<tr>
<td>SRVC General Number</td>
<td>(925) 866-1822</td>
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<tr>
<td>SRVC Division Office</td>
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<tr>
<td>Admissions Office</td>
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<td>Bookstore</td>
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<td>Counseling</td>
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### DVC Catalog 2006-2007

- **Editing**: Chris Knox, Kim Schenk
- **Course descriptions**: Maria Barno, Sue Reed, Carol Yacorzynski
- **Design**: Judy Klein Flynn
- **Photography**: Judy Klein Flynn, Ray Stansbury and other DVC photographers
Main campus map

<table>
<thead>
<tr>
<th>service/program</th>
<th>building</th>
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<tbody>
<tr>
<td>Administration Bldg.</td>
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<tr>
<td>Admissions Office</td>
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<td>Arena Theater</td>
<td>AB</td>
<td>C5</td>
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<tr>
<td>Art/Photography Gallery</td>
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<td>Assessment Center</td>
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<td>Associated Students of DVC/Clubs</td>
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To DVC Pleasant Hill

680 Northbound:
exit Concord-Burnett Ave.
left on Diamond Blvd.
left on Concord Ave.
left on Contra Costa Blvd.
right on Golf Club Rd.
DVC is on the left

680 Southbound:
exit Concord Ave.
left at light, south on
Contra Costa Blvd.
turn right on Golf Club Rd.
DVC is on the left

SRVC - San Ramon Valley Campus
3150 Crow Canyon Place, San Ramon

(CSUH) now CSUEB - California State
University East Bay, Concord
4700 Ygnacio Valley Road, Concord

WCC - Walnut Creek Center
1250 Arroyo Way, Walnut Creek

Diablo Valley College Catalog 2006-2007 • Campus map