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Diablo Valley College and San Ramon Campus
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Introduction
Introduction

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 his huge Rancho Las Juntas, 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 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. The new San Ramon Campus in Dougherty Valley opened its doors to students in November of 2006. 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.
Vision Statement
Diablo Valley College will continuously evolve as a learning centered institution committed to the community it serves, to the development of our students as responsible citizens of the world, and to the positive transformation of student lives.

Statement of Values
Diablo Valley College is committed to the following core values:

1. Learning - the growth, development and goal achievement of all students, staff, and faculty.
2. Equity - the promotion and enhancement of equal opportunities for success for all groups of students regardless of their backgrounds or cultures.
3. Excellence - the pursuit of the highest standards for our students and the institution as a whole.
4. Creativity - the encouragement of imagination and innovation in support of student and institutional progress.
5. Diversity - a sincere respect for differences among perspectives, ideas, peoples, and cultures.
6. Integrity - the responsibility to both teach and model the rigorous pursuit of truth and self-knowledge.
7. Responsiveness - effective response to the needs of our students and our community.
8. Collaboration - a team effort to earn and develop trust, respect, and appreciation for the contributions of all persons.
9. Communication - the exchange of ideas and information freely, with candor, honesty, and respect.
10. Academic Freedom - the free exploration of ideas and perspectives by all members of the community and the responsibility inherent in such freedom.
11. Accountability - the continuous assessment of institutional effectiveness as evidence of how well we are fulfilling the trust placed in us by the community.
12. Stewardship - leadership for the community in the wise use of resources and the protection of the environment.

Mission
Diablo Valley College, a publicly supported, comprehensive community college, prepares students to engage in advanced studies through transfer to four-year programs, equips them to become skilled and current in their respective professions, and provides courses and programs that promote lifelong learning.

DVC defines its students, both matriculated and prospective, as individuals who show interest in and ability to benefit from a college education. The college's open admissions policy is grounded in the belief that opportunity and quality can coexist in a diverse educational environment.

The college provides a core of liberal arts and science courses, specialized career/technical programs, and support services to meet the diverse needs and abilities of students. Four primary missions constitute the critical educational 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 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.

In order to fulfill these missions, the college seeks to maintain a physical environment that is safe and conducive to learning and intellectual growth, while operating in accordance with the highest standards of fiscal and administrative accountability. The college environment is enhanced through the use of the most recent information technology, which offers the college community access to resources from throughout the world.

Philosophy

The primary objective of Diablo Valley College is the development, growth and success of each of its students. We believe that 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 the college and the student.

We recognize the dignity and intrinsic worth of the individual and will make every effort to design programs to meet individual needs, interests and capacities. We believe 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 support services in order to help students develop and realize their goals;
• to provide the highest possible level of access to a student body which 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 establish open communication with students and to provide them with opportunities to participate in institutional decision-making;
• 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; and
• to instill an appreciation for the values and contributions of other cultures and to foster a global and international perspective among all students.

We will continually seek and support 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. We will encourage and support professional development opportunities for all staff members and we will all share in the responsibility for helping students to achieve their educational goals.

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. We believe that widespread access to excellent postsecondary education is the cornerstone of a democratic society.

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 programs to pursue, but we also feel obliged to assist each student make informed choices and to develop the skills and proficiencies appropriate to college work.

We believe that a good education is fundamental to the democratic process. Therefore, we value the unique contributions of each student and we believe all of DVC's educational programs are of equal importance. We believe the heart of the college is the student and the student is a whole human being - the sum of one’s feelings, beliefs, thoughts, and attitudes, as well as 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, improve and/or develop new work-related skills, 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 at the Pleasant Hill campus; at the San Ramon 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 career/technical programs that may be completed during evenings and/or weekends.

**Online and hybrid courses**

DVC and SRC 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](http://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 Campus**

The San Ramon Campus (SRC) is DVC’s campus in San Ramon and currently enrolls over 4,000 students each semester. Our brand-new campus in Dougherty Valley is a state-of-the-art educational facility that has been designed to meet the expanding learning needs of our community.

Many students choose to take all of their courses at the San Ramon Campus, while others choose to enroll in classes at both the San Ramon and the Pleasant Hill campuses. The San Ramon campus is located in a village, which includes a 29,000-square-foot community center and an 11,600-square-foot library. SRC provides an opportunity for DVC students to receive the same excellent instruction in an intimate setting.

The San Ramon Campus offers a full complement of general education courses leading to an associate degree and/or transfer to a four-year institution. In addition, SRC offers Computer Information Systems (CIS) workshops and courses in the latest software and network technology areas. Many courses are offered in short-term and online formats; check the current schedule for specifics.

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

SRC is located at 1690 Watermill Road in San Ramon. The telephone number is listed in the telephone directory in the back of the catalog. SRC’s website is [www.dvc.edu](http://www.dvc.edu).
Walnut Creek Center
DVC offers courses at the Walnut Creek Center located at 1250 Arroyo Way, Walnut Creek. The site features computer labs and classrooms in the heart of 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:
- 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 is located in the Student Services Center, next to the Admissions and Records Office.

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 and Records 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 or an all-day Saturday session. The class is taught by a counselor who provides information about DVC academic and voca-
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.

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 and Records Office. A student is generally 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 can use the online application available at www.cccapply.org/Applications/CCC_International_Application/apply/Contra_Costa_CCD.html. When using the online application you must pay the $50 application fee by credit card. The application can also be downloaded and printed from www.dvc.edu/isas. International students are required to comply with immigration regulations and must submit supporting documents for admission purposes. A checklist to ensure that students understand what they need to submit to be admitted as an international student to DVC is available at www.dvc.edu/isas/requirements.htm. 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 and Records Office. International students who wish to transfer to DVC must submit an international student application and must send all documents including transcripts to the International Student Admissions and Services Office.
Fees, costs and refunds

Enrollment fees*

- Tuition is $20 per unit for California residents.
- Tuition is $163 per unit, plus $20 enrollment fee, for U.S. citizens or permanent residents who are not California residents.
- Tuition is $177 per unit, plus $20 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 regulation 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.

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.

How to apply

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 and Records Office.

Transcripts

Students should send official transcripts to the Admissions and Records 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.
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 and SRC. During the summer, parking permits are $2 per day for short-term parking, $20 per term for automobiles, and $10 for motorcycles and mopeds.

Parking permits are not required at SRC.

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 activity fee (optional)
Students who pay the optional $7 student activity fee receive a sticker to affix to their Connect Card entitling them to discounts for student-related activities.

Student union fee
The $1 per unit fee helps pay for the maintenance of the Student Union Building. The maximum fee is $10 per student per academic year.

Online or telephone registration fee
There is no fee for online or telephone enrollment.

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 generally available (one hour service) for a cost of $10 per transcript.

Verification of enrollment fees
Students can receive a free verification of enrollment through WebAdvisor (available 24 hours a day, seven days a week.) Verifications requested through the Admissions and Records 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 (one 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 and Records 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.

Financial assistance
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 Student Services Center or visit the financial aid web page at www.dvc.edu/financialaid.

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 in the Financial Aid Office or apply online at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). You can also complete a Board of Governor’s Waiver (BOGW) application, which is available in the Financial Aid Office. The BOGW form must be submitted to the Financial Aid Office for processing.

Federal PELL grant
Students may receive a PELL Grant up to $4,310 per year as determined by the Department of Education. 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](http://www.fafsa.ed.gov).

Notification
Upon completion of any additional requirements, 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](http://www.fafsa.ed.gov).

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 for two years.

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 (up to 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 Financial Aid Office.

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](http://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. To schedule an appointment call (925) 685-1230 ext. 2369.

Notification
Students are notified by the Financial Aid Office.
Loans

Federal loans
Low interest federal Stafford loans are available to students and parents. For specific information contact the Financial Aid Office or visit the financial aid web page at www.dvc.edu/financialaid.

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 or apply online at www.fafsa.ed.gov. 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
First 5 ECE Professional Development Program
Financial aid is also available for students preparing for a career in early childhood education. Tuition stipends are available through the Child Development Training Consortium for students currently employed in child development programs. Textbooks loans, tutoring, scholarships and additional incentives are available through the First 5 ECE Professional Development Program. Eligibility guidelines, applications and further information can be obtained at the ECE Professional Development Office in FL-202 or by contacting Sue Handy at ext. 2162 or shandy@dvc.edu.

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 be eligible for a scholarship for the next academic year.

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

Notification
Scholarship award letters will be mailed to recipients in 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 late April.

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, room 110 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 and Records 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 may be 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.

Registering for courses

Adding, dropping, and enrolling in courses
Students are responsible for managing their enrollment. A registration receipt is proof of enrollment. Students are also responsible for officially dropping courses. DVC does not permit auditing. Registration can be done online or over the telephone. See the schedule of courses for registration dates and times.

Schedule of courses
The schedule of courses is a list of DVC’s course offerings each term. It is published each term prior to registration and is available in the Book Center. The schedule is also available to view or search on the DVC website at www.dvc.edu.

Registration appointments
For currently enrolled students, a priority appointment system is used for registration. The registration appointment is based on the number of units the student has completed in the district. The more units completed, the earlier the registration date. Students may register online or by telephone anytime on or after their appointment time.

New students
New students must complete the application and assessment process and sign up for an orientation/advisement course, Counseling 105, to receive the earliest possible registration appointment. Once Counseling 105 has been completed, students will be assigned a priority registration appointment. Registration appointments can be viewed on WebAdvisor at www.dvc.edu.
New transfer students
New transfer students who have completed fewer than 12 units must complete the application and assessment processes and sign up for an orientation/advisement course, Counseling 105, in order to obtain the earliest possible registration appointment. New transfer students who have completed more than 12 units must file an application for admission to receive a registration appointment. It is recommended that transfer students see a counselor to review their prior academic work and plan an academic program.

Continuing students
A registration appointment is automatically assigned to all continuing students and can be viewed on WebAdvisor at www.dvc.edu.

Returning students
Students who have been away from DVC for one term must file a new application for admission. Once their application is processed they will be able to view their registration appointment on WebAdvisor at www.dvc.edu.

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. Sophomores and below 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 certifiable units in order to receive full veteran’s benefits.

International students must carry at least 12 certifiable 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 may register by telephone or online if they are registering using a 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 WebAdvisor 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. The student may instead go to the class to get the instructor's signature. Return the signed schedule request form to the Admissions and Records 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 and Records Office. To officially drop a course, students must either submit a Schedule Request Form to the Admissions and Records 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. Students are advised to print a copy of 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 and Records Office an original permission note that has been signed by the student. Transcript requests require 7-10 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.
in Cooperative Education (units for current employment), Field Studies (units for being an instructor's aide, lab or research assistant), and volunteer services, and has a spacious, comfortable environment to explore the latest career library and web-based employment resources.

**CalWORKs Program**
**ext. 2722 or 2081**

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 ensure that they access all available resources.

**Career Services**
**ext. 2435**

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

- a career library of different occupational areas containing relevant books, periodicals, directories, and magazines;
- ten 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, and labor market trends;
- 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](http://www.dvc.edu/career).

**Cooperative Work Experience Education - earn units for learning while working**
**ext. 2435**

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 and Employment Services or visit the DVC career website at [www.dvc.edu/career](http://www.dvc.edu/career).

**Contra Costa County Office of Education - Transition Program**
**ext. 1977**

This program offers support to disabled students who 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 in group instruction. Referrals are handled through the special education I.E.P. process with the local school district.
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;
- tutor referral program - qualified students are referred to community residents;
- personal assistance with resume preparation, interview techniques, and the application process;
- online access to volunteer jobs, including paid and non-paid internships;
- library of employment preparation handouts;
- current job fair, seminar, open house and workshop announcements.

Volunteer Services
ext. 2579
Volunteer Services serves as a resource for students interested in service learning. Participants search for service opportunities that address community-identified needs or those that facilitate academic, personal and/or civic growth. Participants learn practical and interpersonal skills and have the opportunity to apply what they have learned in the classroom to real-world situations off campus.

Volunteering in the community:
- promotes civic responsibility and personal pride;
- enhances university and scholarship applications;
- makes use of the surrounding communities as part of the classroom for learning;
- enables the development of meaningful, long-lasting relationships within the community;
- provides experience in a major or future career field while making a difference in the lives of others;
- gives students the opportunity to learn from individuals who have similarities and differences, socially, economically, educationally, physically, and/or culturally.

For more information, visit www.dvc.edu/career/volunteer.htm.

WorkAbility III Program
ext. 2553
WorkAbility III is a partnership program between the Department of Rehabilitation (DOR) and Diablo Valley College to provide job placement services for students with disabilities who are "job ready" and who want to go to work. The main purpose of the WorkAbility III Program is to provide individualized and specialized job placement for students with disabilities.

Child care
ext. 2316
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.

College Success Workshops
These workshops are provided free of charge to DVC students. They are taught by DVC faculty members and cover a wide range of topics, including: time management, note-taking and study skills, dealing with math anxiety, in-class writing, reading strategies, learning styles, writing your college application letter, and library research. These workshops are scheduled Tuesdays from 5:30-6:45 p.m. and on Wednesdays from 2:30-3:45 p.m. and they take place in the Student Union Conference Room. No pre-registration is required. All are welcome. College Success workshops are also offered at the San Ramon Campus. See SRC student services for details.

Computer Center
ext. 2541
The computer center has more than 100 computers available for use by currently enrolled DVC students doing coursework. The center is located on the ground floor of the Library Building. Student lab assistants are available to help.

Counseling Center
ext. 2276 or 2278
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 certicate programs;
- the Transfer Center and its resource library;
• career planning, transfer and college success courses;
• personal counseling;
• individual and group counseling;
• topical workshops such as college applications;
• counseling regarding major and transfer options;
• 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 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.

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 available 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 Campus.

Emergency services
ext. 2339 or 2338

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. For more information and safety tips visit www.4cd.net/police_services.

English as a Second Language (ESL)
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, pass/no pass 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 available in the Learning Center. Ask about our ESL Student Guide Book. The Information Center is located in the Student Services Center.

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, progress reports 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 child-care grants for students who are not eligible for the CARE program. Special events and activities include campus visits, 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 rising 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. The program is designed to serve potential EOPS students.

EOPS eligibility
Students must be enrolled full-time, be eligible for the California Board of Governor's 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. CARE students must be eligible for EOPS to receive CARE services.

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.

DVC food service catering
Food service catering offers a wide variety of food and beverage choices for your campus event needs.

DVC Bakeshop
ext. 2556/2225

Located in the northwest corner of the quad by the cafeteria, the bakeshop offers fresh baked breads, pastries, breakfast items, and desserts prepared daily from scratch by culinary arts students. The bakeshop is open during fall and spring term. Special orders are available upon request.

DVC Culinary Arts on-campus catering
ext. 2225

Catering for groups, custom banquets and buffets are offered by the culinary arts students. On-campus catering is offered during spring and fall semesters. For more information contact ext. 2225.

Express Bar
ext. 2300

Located in the Norseman Restaurant adjacent to the cafeteria and operated by culinary arts students. The Express Bar offers students, faculty and the community casual meals such as pasta, paninis and special daily entrees at affordable prices. The Express Bar is open during the fall and spring semesters.

Norseman Restaurant
ext. 2300

Located adjacent to the cafeteria and operated by culinary art students, the restaurant treats students, faculty and the community to fine dining at affordable prices. Call for operating hours, and to make reservations for lunch or special dinner series evening meals.

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. Students can visit www.dvc.edu/union/HousingResources.htm.

Information Center/Outreach Office
ext. 2578

The Information Center is a great starting point for new students to learn about all the student services available at Diablo Valley College. The 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.
The Information Center is located in the Student Services Center, first floor.

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 student 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, transfer procedures, and mandatory health insurance. Other important student services offered at ISAS include medical referral information, 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 Student Services Center, or go to [www.dvc.edu/isas](http://www.dvc.edu/isas).

**Library services**

The libraries, located at both the Pleasant Hill and San Ramon 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](http://www.dvc.edu/library)

Resources 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](http://www.dvc.edu/library);
- information commons with computers that provide access to electronic resources and the Internet;
- instruction: credit courses and workshops on library research skills;
- computer lab classroom;
- student group study rooms.

**Media Center/Audi-Visual**

ext. 2254/2255 student services
ext. 2248/2249 faculty/staff services

The Media Center’s collection contains over 4,000 videotapes, 800 DVDs, assorted CDs and audiotapes, and slide programs. All materials may be viewed by students in the Media Lab for their own research or to make up for a missed viewing in the classroom. Materials are found on ALICE, the online library catalog.

Equipment is available for general listening and viewing, audio recording and mixing, videography, video editing, and other course projects.

The Media Center/Audio-visual is located on the ground floor of the library building. [www.dvc.edu/media](http://www.dvc.edu/media).

**Peer Support Center**

ext. 2616 or 2095

The Office of Student Life is committed to supporting new and re-entry students and encouraging their success by providing a friendly place for students in transition to college. The Peer Support Center offers 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.

**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 schedules, ID cards, and information about student discipline, academic standing, and campus crime statistics.
Student Services - San Ramon Campus
SRC students have access to many of the same student services available at the Pleasant Hill campus including admissions, assessment, bookstore, computer labs, counseling, disabled student services, financial aid and scholarship information, job postings, math and foreign language 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 are also housed here. Students may also relax at the duck pond, located behind the building.

Students may pick up their free DVC Connect Card 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 schedules, fax service, a coin-operated copier and a station for adding value to print cards.

Transfer Center
ext. 2588
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, seeks 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 provides the following resources and services:

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

The Transfer Center also sponsors special events throughout the year such as campus tours and transfer days. All scheduled activities are posted outside the Counseling Center and on the DVC website at www.dvc.edu/transfer and at www.dvc.edu/calendar.

Tutoring services
ext. 2125
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 SRC 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.
Business Education Computer and Tutoring Lab, open to students for general use, offers tutoring for business and finance courses by appointment or on a drop-in basis. Help with accounting, business statistics, business math and most Microsoft Office products is available. Location: BFL-107. Hours are posted outside BFL-107 or visit www.dvc.edu/aim/campuslab.htm. For further information, please call ext. 2905.

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 Center 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 and drop-in tutoring is one-on-one peer tutoring for up to two hours a week throughout the semester. Other services include: walk-in tutoring in the English Writing Lab (no appointment necessary), computer-assisted instruction, and an online writing lab. Information on services is available on the first floor of the Learning Center Building in LC-105. See the schedule of courses for hours or visit www.dvc.edu/tutoringservices and select “English Tutoring Lab” to download free English handouts and more information.

EOPS and DSS offer tutoring in a variety of basic skills subject 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-211. Hours are posted outside BFL-211.

Life Sciences Lab offers tutoring on a drop-in basis in biological science, nutrition, and oceanography. Location: LHS-116. Hours posted throughout the LHS 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.

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

Tutoring Center offers one-on-one and group tutoring by appointment or drop for a variety of subjects, including social sciences, humanities, computer science, and math. The Tutoring Center is located on the ground floor of the library building. For hours and tutor schedules, visit www.dvc.edu/tutoringservices.

Extracurricular activities

Student activities

Associated Students of Diablo Valley College (ASDVC) - student government
http://voyager2.dvc.edu/ASDVC/ASDVCHome.htm
ext. 2621

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, 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 ASDVC sticker sales. Funding provides scholarships for students, co-sponsorship of campus events, multicultural programs, club events, and support for student athletes.

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 and diving, tennis, track and field, and water polo.

Women’s teams
Women compete in basketball, cross-country, soccer, softball, swimming and 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.

Student clubs
Most of the student activities at DVC are initiated by clubs or other student organizations. Over 50 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.

Studies
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.

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, Philharmonic Orchestra, Wind Ensemble, Symphonic Band, Chamber Ensemble, 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.
More educational programs

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: www.dvcdrama.com

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.

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.

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). In addition, 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
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 enrichment activities for motivated young people in the fourth through the ninth grade. The activities take place on the DVC and SRC 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.

Emeritus College offers lectures, educational travel opportunities, concerts and other special events. Brochures are published four times each year. For more 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](http://www.dvc.edu/emeritus).

**Learning communities**

Enroll in a DVC Learning Community! Colleges across the country have found that students in Learning Communities are more connected with their classes, teachers, and fellow students. When you join a Learning Community, you will join a group of students all enrolled in one or more classes that are linked together by a common thread. This thread could be of many types - for example, subject matter, personal interests, cultural perspective, or life goals. Concurrent enrollment is required in all course sections within a specific Learning Community, unless otherwise noted.

So get the most out of your time at DVC by experiencing an innovative curriculum, academic and personal support, and the opportunity to make friends with a variety of people with whom you will share an enriched common educational experience.

Find out more about specific learning communities under the Learning Communities heading in the Course Listing section of the printed schedule.

**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 2008 - Florence, Italy
- Summer term 2008 - Salamanca, Spain
- Summer term 2008 - Capetown, South Africa
- Summer term 2008 - Ghana
- Fall term 2008 - London, England
- Spring term 2009 - Florence, Italy

For more information, contact the Study Abroad Office located in FO-219, visit studyabroad@dvc.edu, or call ext. 2735 or check Study Abroad under the Student Service link on the DVC website www.dvc.edu.

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, provides instruction in related courses, and introduces student support services through a counseling class. The Ujima Program is open to all students.

Attendance at the first class meeting
If a student wishes to secure a place in class, he or she must attend the first class meeting. The instructor may drop students who do not attend the first class meeting, thereby opening a space for students wishing to add the course. If students do not attend the first class meeting, it is still their responsibility to officially drop the class.

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(s) 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 - Altering or interfering with evaluation instruments and documents including transcripts;
Fabrication - Falsifying experimental data or results, inventing research or laboratory data or results for work not done, or falsely claiming sources not used; or falsifying participation in a class in any way;

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 distributing exams to other students.

Course requirements and credit

Course work and units

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 the 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 19 units in the fall or spring term or 12 units in the summer term must have permission from the dean of counseling and student support services prior to repeating the course. This appeal may be initiated by requesting a form in the Counseling Center or submitting the request online at www.dvc.edu/counseling/forms/Petition1.htm. 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 instructional services 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 online, by telephone or in person at the Admissions and Records 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 and/or co-requisites
Students enrolling in a course with a prerequisite must complete that prerequisite with a “C” grade or better 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.

Please note: if you drop a class with a co-requisite you will also be dropped from both classes.

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 completed the prerequisite course at DVC fall 1999 or later with a “C” grade or better your prerequisite will automatically be cleared when you go to register. If you took the course at DVC, CCC or LMC prior to fall 1999, you must contact the Admissions and Records Office.

If you completed the prerequisite at another educational institution, the Admissions and Records Office will need to clear your prerequisite requirement prior to your registration appointment time. There are a few ways in which you can do this.

• If your official transcripts have been received, submit a Prerequisite Form.
• You may submit your official or unofficial transcript along with a Prerequisite Form.
• Your may fax your unofficial transcripts along with a Prerequisite Form.

If approved, your prerequisite will be cleared in 48 hours. If denied, you will be notified. All prerequisites must be posted before you can register online or by telephone. 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 and/or co-requisite 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 and Records Office.

How to file a prerequisite or co-requisite challenge
Students must file their challenge form at the Admissions and Records Office at the time they register for the course. 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 for the following reasons are reviewed by the division dean who has final approval:

• The prerequisite is based on health or safety and is either not valid or does not apply to a particular student.
• The prerequisite is discriminatory on the basis of ethnicity, religious belief, political persuasion, age, gender, or sexual orientation.
• The prerequisite course has not been reasonably made available at DVC.
• The prerequisite was not established according to state law.

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 toward 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 and Records Office and a request made for this examination credit to be posted to your 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 meets 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 or Statistics, 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 or Statistics, the proficiency requirement will be met.

   **Area II. Natural sciences**
   With a score of 3, 4, or 5 on the Biology or Chemistry or Physics B or Physics C exams, the "course requirement" will be met.

2. CLEP
   Students may petition the Admissions and Records 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.

**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)

**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.
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
- Art Digital Media 110
- Biological Science 101
- Education 120
- Engineering 126
- Library Science 121
- Music 122 and 123

4. Military service credit

Veterans may apply for evaluation of military service for credit through the Admissions and Records 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 and Records 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.

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 Student Services Center SSC-202.

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 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. 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 on 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 vice 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.

For more information or to initiate a grievance contact:

  Vice President of Student Services (504, Title IX, Sexual Harassment; Title VI Coordinator and EEOC Officer) (925) 685-1230 ext. 2232
  Director of Business Services (ADA Coordinator) (925) 685-1230 ext. 2533
  Dean of Student Life (EEOC Officer) (925) 685-1230 ext. 2445
  Disability Support Services Manager (925) 685-1230 ext. 2926

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.

Grading

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>Description</th>
<th>Grade points per unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>Satisfactory</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>Passing, less than satisfactory</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>Failing</td>
<td>0</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
<td>0</td>
</tr>
<tr>
<td>P</td>
<td>Pass</td>
<td>0</td>
</tr>
<tr>
<td>NP</td>
<td>No Pass</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 “NP” grades are considered in determinations of progress probation and dismissal:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
<th>Grade points per unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>Withdrawal</td>
<td>0</td>
</tr>
<tr>
<td>IP</td>
<td>In Progress</td>
<td>0</td>
</tr>
<tr>
<td>RD</td>
<td>Report Delayed</td>
<td>0</td>
</tr>
</tbody>
</table>

The following are non-evaluative symbols:

<table>
<thead>
<tr>
<th>Grade</th>
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<th>Grade points per unit</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0</td>
</tr>
<tr>
<td>IP</td>
<td>In Progress</td>
<td>0</td>
</tr>
<tr>
<td>RD</td>
<td>Report Delayed</td>
<td>0</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 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 and Records Office.

Pass/no pass grades (P/NP) (formerly CR/NC)
These grades are not figured into grade point averages, although the units for P grades are applied toward the 60 required for an associate degree. Four-year colleges often limit the number of P units that they will accept from transfer students. To determine if there are any negative implications to choosing a P/NP grading, students are advised to check with the college to which they intend to transfer. P/NP grade option 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 P/NP grade. Students must complete a form in the Admissions and Records Office to take the course for a P/NP grade. If students do not choose the P/NP option before the deadline, 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 instructors 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 division 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 corrected, 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 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 pss (P) or no pass (NP). Credit/no-credit grades cannot be changed to letter grades once 25 percent of the class has passed.

The informal steps below - 1 and 2 - 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 policies) 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 department chair 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 department chair is unsuccessful, he or she should prepare a written summary of the mediation efforts and forward it to the division dean.

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.

If the committee does find that fraud, bad faith, or incompetence led to a grading error, the rationale for the decision must be stated in the recommendations, and the committee must recommend a replacement grade to the president.

c. The president will review the committee’s recommendations, then notify the student, the faculty members, the members of the committee, the Faculty Senate president and the vice president of academic affairs or designee, of the college president’s decision within ten instructional days of its receipt.

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/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 department chair mediation. If unresolved, then,

3. Request division dean mediation. If unresolved, then,

4. Request formal hearing with complaint review committee by submitting a formal written complaint to the vice president of academic affairs office.

   a. Hearing with committee
   b. Committee recommendation to college president
   c. President’s review and decision

5. Student and faculty member have appeal rights.

6. Final decision.

Improving a grade point average

Course repetition

When students receive a substandard grade (“D,” “F,” or “NP”) for a course, they may enroll in it a second time without being required to request permission. If it becomes necessary for students to attempt a course for the third time, they must request special permission to do so. This request may be made online at www.dvc.edu/counseling/forms/Petition1.htm, or may go to the Counseling Center to complete the form.

If students repeat a course, only the better of the two grades will be used in the GPA calculation. (If both grades are the same, then only one will be counted). However, both grades will appear on the transcript, and the units for the course will only be counted once. An “R” notation will appear next to the lower of the two grades indicating that the course has been repeated.

Academic renewal without course repetition

Academic renewal allows students to have up to 15 units of substandard grades (“D,” “F,” or “NP”) excluded (without the student’s having to repeat the course) from their grade point averages. To be eligible, students must have earned 20 consecutive units of “C” grade work or better since the substandard 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 and Records Office.

Instructional material policy

Students enrolled in pass/no pass 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 California Community 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;
- 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 toward 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:
  - students on academic or progress probation (generally accomplished through participation in small group probation seminars);
  - students enrolled in developmental courses. (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);
  - 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 less.

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 dean of outreach, enrollment services and matriculation and complete an “appeal or request for waiver” form or file a complaint regarding matriculation rights.
Academic/instructional policies and procedures

Academic/instructional policies and procedures

Academic/instructional policies and procedures

Academic/instructional policies and procedures

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-served 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, or visit www.4cd.net/police_services.

Probation and dismissal policy

Academic probation

We expect our students to make steady progress toward their educational goals by maintaining a "C" average or better 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 schedule a meeting with a counselor. 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 for two consecutive semesters.

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 "NP" 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," "P," "NP," "IP," or "RD"). Students on stage one probation will be encouraged to schedule a meeting with a counselor. 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 for two consecutive semesters.
**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 (located in the Media Center) explaining the probation process 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.

**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 debilitates 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.

**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 Campus, smoking will be allowed only in the parking lots.

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 Code of Conduct - Student Services Procedure 3027**

Revisions to the Student Code of Conduct have been proposed and are currently under review. You may access the most current Code of Conduct at [www.dvc.edu/union/CodeAll.htm](http://www.dvc.edu/union/CodeAll.htm).

**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 staff, 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.
4. Use, sale, or possession on campus of, or presence on campus under the influence of any controlled substance, or any poison classified as such by Schedule D in section 4160 of the Business and Professions Code.
5. Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the governing board.
6. Persistent serious misconduct where other means of correction have failed to bring about proper conduct.
7. Other behavior that has good cause for disciplinary action.

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, violence 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 section 4160 of the Business and Professions Code or other California laws, on district property or at any district-sponsored event. This regulation does not apply when the person named on the prescription possesses the drugs or narcotics or when the drugs or narcotics are permitted for and are being used in research, instruction, or analysis;
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 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 7.6033, 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 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 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 (c) 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
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 within 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 notification 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 suspension to the college president. 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 own 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 student. 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

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 or Section 504 of the Rehabilitation Act of 1973 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 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 and Records 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 and Records 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 any 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.

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
Transfer

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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 and Records 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 Pass (P) units
Each CSU campus sets its own limits as to the number of P (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
- Construction 266, 267
- Counseling 100, 105, 106, 107
- 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
- Real Estate 150

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 (i.e., 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.
Transfer information

Some impacted campuses do not accept lower division transfers (students with fewer 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 writing 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.

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

Letter graded and Pass (P) units
No more than 14 of the UC transferable units may be graded P. 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 science, computer science, and engineering
- 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 s/he graduated from high school (meaning s/he satisfied all subject, scholarship, and examination requirements), s/he is eligible to apply to transfer if s/he has 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, s/he met the scholarship requirement but did not satisfy the subject requirement, s/he 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 s/he graduated from high school because s/he did not meet the scholarship requirement, s/he 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 2.0.

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 or 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.
CSU general education requirements

At the time this catalog went to press, CSU had not approved the G.E. list for 2008-2009. The information on these two pages is the list that was approved for 2007-2008 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.

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. Communication in the English language and critical thinking

Complete 9 units (one course from A-1, A-2 and A-3). A grade of "C" or higher is required for certification, CSU admission and/or graduation.

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

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

A-3. Critical thinking
Course requirement - 3 units
Complete one course from:
English 126
History 122
Philosophy 130
Sociology 132
Speech 121, 123

B. Physical universe and its life forms

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.

B-1. Physical science
Course requirement ** - 3-5 units
Complete one course from:
Astronomy 110 (add Astronomy 130* for lab), 120 (add Astronomy 130* for lab), 128*
Chemistry 106*, 108*, 109*, 120*, 121*, 226*, 227*

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

B-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.

B-4. Mathematics/quantitative reasoning
Course requirement** - 3-4 units
A grade of "C" or higher is required.
Complete one course from:
Business 240
Mathematics 121, 124, 135, 135SP (3 units), 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 language

Course requirement - 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.

C-1. Arts (Art, Dance, Music, Theater)
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 Digital Media 214
Art History 193, 195, 196, 197, 199

Geography 120 (add Geography 121* for lab), 140 (add Geography 141* for lab)
Geology 120 (add Geology 122* for lab), 121 (add Geology 124* for lab), 125
Oceanography 101, 102*
Physical Science 112
Physics 110 (add Physics 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.
Broadcast Communication Arts 140
Dance 201
Drama 122, 139, 140, 141, 142, 150, 170, 180, 181
English 152
Film 140, 160, 180, 280, 281, 282, 283, 284
Music 252, 255
Music Literature 110, 112, 113, 114, 115, 116, 117, 118
Music Performance 136, 140, 144, 162, 166, 176, 180, 240, 290
Speech 148

C-2. Humanities (Literature, Philosophy, Foreign Language)

Course requirement**, 3-6 units
Complete one or more courses from:
Arabic 121
Architecture 155, 160
Broadcast Communication Arts 260
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, 140, 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-1. Anthropology and archaeology
Anthropology 120, 125, 130, 135, 150

D-2. Economics
Economics 101, 200, 220, 221

D-3. Ethnic studies
Anthropology 120, 135
History 124, 125, 126, 127, 128, 129, 130, 170, 171
Psychology 140, 141
Social Science 115, 120, 220
Sociology 131, 135

D-4. Gender studies
History 170, 171
Social Science 120, 220

D-5. Geography
Geography 130, 135

D-6. History
History 120, 121, 124, 125, 126, 127, 128, 129, 130, 135, 136, 140, 141, 150, 151, 160, 170, 171, 240

D-7. Interdisciplinary social or behavioral science
Gerontology 100
Journalism 110
Social Science 110, 111, 115, 120, 123, 162, 163, 220

D-8. Political science, government and legal institutions
Political Science 120, 121, 151, 220, 240, 250

D-9. Psychology
Early Childhood Education 124

D-10. Sociology and criminology
Administration of Justice 120, 139
Sociology 120, 121, 123, 124, 125, 131, 135, 140

E-1. Lifelong understanding and self development

Course requirement - 3 units
Complete one course from:
Career 110
Counseling 120
Early Childhood Education 124
Health Science 124, 170
Nutrition 115, 160
Physical Education-Dance 130, 136, 142
Psychology 122, 140, 141, 160

E. Lifelong understanding and self development
Graduation requirement in 
U. S. History, Constitution and 
American Ideals

Course requirements - 6 units

Required for graduation from CSU. This graduation requirement may be fulfilled, but is not required, prior to transfer. Courses used to fulfill this requirement may double count with courses in Area C or D.

Choose one pair of courses from the following list:
- History 120 and History 121 or 124 or 128 or 171 or Political Science 121 or 151 or Social Science 111 or 220;
- History 121 and History 120 or 127 or Political Science 121 or Social Science 111 or 115 or 120 or 220;
- History 124 and History 120 or 127 or Social Science 120;
- History 125 and Political Science 121 or Social Science 111 or 220;
- History 126 and Political Science 121 or Social Science 111 or 220;
- History 127 and History 121 or 124 or 128 or 171 or Political Science 121 or 151 or Social Science 111 or 220;
- History 128 and History 120 or 127 or Political Science 121 or Social Science 111 or 115 or 120 or 220;

Intersegmental general education transfer curriculum

The IGETC is a general education pattern that community college transfer students can use to fulfill lower-division general education requirements 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 and Records 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 and Records Office.

CSU and UC applicants must also meet admission, major, prerequisite, and transferable unit requirements.
IGETC Intersegmental general education transfer curriculum

At the time this catalog went to press, the IGETC list for 2008-2009 had not yet been approved. The information on these pages is the list that was approved for 2007-2008 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 except for courses in Languages other than English.

Area 1. English communication

Course requirement:
CSU - 3 courses required, 1 each from group A, B and C.
UC - 2 courses required, 1 each from group A and B.

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+, 135SP+(3 units), 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 Digital Media 214
Art History 193, 195, 196, 197, 199
Drama 139, 140, 141, 142, 160, 181
Film 140, 160, 180+, 280, 281+, 282, 283, 284
Music Literature 110, 112, 113+, 114, 115, 116, 117+, 118+

3-B. Humanities
Complete 1 or more courses from:
Arabic 121*
Architecture 155+, 160+
Chinese 121+, 220*, 221*
English 150, 151, 152+, 153, 154, 162, 163, 164, 166, 167, 168, 170, 172, 173, 175, 177, 180, 190, 252, 253, 262, 263, 272, 273
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*, 170*, 240*
Italian 121*+, 147*+, 220*, 221*, 230*, 231*
Japanese 121*, 147*+, 220*, 221*, 245*
Latin 121*
Persian 121*
Philosophy 120, 122, 140, 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.

* Course may be listed in more than one area, but shall not be certified in more than one area except for courses in Languages other than English.
+ Indicates that transfer credit may be limited by either UC or CSU or both. Please consult with a counselor for additional information.
**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
- Early Childhood Education‡ 124
- Economics 101+, 200+, 220+, 221+
- Geography 130
  †History 120+, 121+, 124+, 125*, 126*, 127*, 128*, 129*, 130*, 135*, 136*, 140*, 141*, 150*, 151*, 170*+, 171*+, 240*
- Journalism 110
  †Political Science 120, 121, 220, 240, 250
- Psychology‡ 122, 130, 140, 141, 160, 190, 210, 220, 230, 240
  †Social Science 110, 111, 115, 120, 123+, 220
- Sociology‡ 120, 121, 123, 124, 125, 131, 135, 140

‡ Two of the three courses must be from different disciplines. Administration of Justice and Sociology are in the same discipline. Early Childhood Education and Psychology are in the same discipline.

† Courses used to satisfy the CSU American History and Institutions requirement may not be counted in Area 4

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**Area 5. Physical and biological sciences**

Course requirement - 7-9 units, at least 2 courses

This requirement includes taking one physical science course and one biological science course from each of groups 5-A and 5-B. At least one course must have a laboratory.

Courses that meet the laboratory requirement are underlined and must be taken with matching lecture course.

**5-A. Physical science**

Course requirement - 3-5 units

Complete at least 1 course from:

- Astronomy 110+ (add Astronomy 130 for lab), 120+ (add Astronomy 130 for lab), 126
- Chemistry 106+, 108+, 109+, 120, 121, 226, 227
- Geography 120, 121, 140, 141
- Geology 120, 121, 122, 124, 125
- Oceanography 101, 102
- Physical Science 112+
- Physics 110+, 111+, 113, 120+, 121+, 129+, 130+, 230+, 231+

Note: AP Physics B or C score of 3, 4, or 5 may be used for 5-A. AP Chemistry score of 3, 4, or 5 may be used for both 5-A and 5-C.

**5-B. Biological science**

Course requirement – 3-5 units, at least 1 course

Complete at least 1 course from:

- Anthropology 115 (no lab), 140 (add Anthropology 141L for lab)
- Biological Science 101+, 102+, 116+, 117+, 119+, 120+, 126, 130, 131, 139+, 140+, 146+, 160, 170, 205

Note: AP Biology score of 3, 4, or 5 may be used for lecture only.

**5-C. Laboratory**

Courses that meet the laboratory requirement are underlined in Area 5-A and 5-B and must be taken with matching lecture course.

* Course may be listed in more than one area, but shall not be certified in more than one area except for courses in Languages other than English.

† Indicates that transfer credit may be limited by either UC or CSU or both. Please consult with a counselor for additional information
Area 6. Languages 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. Three years of high school study in American Sign Language. (A junior or senior high school transcript or approved test score must be on file in the Admissions and Records Office)
  
- Must have successfully completed one of the following foreign language courses:
  - Arabic 120
  - Chinese 120
  - German 120+, 146+
  - Japanese 120+, 146+
  - Persian 120
  - Sign Language 281
  - French 120
  - Italian 120+ 146+
  - Latin 120
  - Russian 120
  - Spanish 120

- 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

Choose one pair of courses from the following list:

- History 120 and History 121 or 124 or 128 or 171 or Political Science 121 or 151 or Social Science 111 or 220;
- History 121 and History 120 or 127 or Political Science 121 or Social Science 111 or 115 or 120 or 220;
- History 124 and History 120 or 127 or Social Science 120
- History 125 and Political Science 121 or Social Science 111 or 220;
- History 126 and Political Science 121 or Social Science 111 or 220;
- History 127 and History 121 or 124 or 128 or 171 or Political Science 121 or 151 or Social Science 111 or 220;
- History 128 and History 120 or 127 or Political Science 121 or Social Science 111 or 115 or 120 or 220;
- History 129 and Political Science 121 or Social Science 111 or 220;
- History 130 and Political Science 121 or Social Science 111 or 220;
- History 170 and History 171 or Political Science 121 or Social Science 111 or 220;
- History 171 and History 120 or 127 or 170 or Political Science 121 or Social Science 111 or 115 or 120 or 220;
- Political Science 121 and History 120 or 121 or 125 or 126 or 127 or 128 or 129 or 130 or 170 or 171 or Social Science 120;
- Political Science 151 and History 120 or 127 or Social Science 120;
- Social Science 111 and History 120 or 121 or 125 or 126 or 127 or 128 or 129 or 130 or 170 or 171 or Social Science 120;
- Social Science 115 and History 121 or 128 or 171;
- Social Science 120 and History 121 or 124 or 128 or 171 or Political Science 121 or 151 or Social Science 111 or 220;
- Social Science 220 and History 120 or 121 or 125 or 126 or 127 or 128 or 129 or 130 or 170 or 171 or Social Science 120

(U.S. History, Constitution and American Ideals is considered by CSU to be a statutory rather than a general education requirement.)

* Course may be listed in more than one area, but shall not be certified in more than one area except for courses in Languages other than English.

+ 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.

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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.

This list is subject to change.

ADJS-120..CAN AJ 2
ADJS-121..CAN AJ 4
ADJS-222..CAN AJ 8
ANTHR-125..CAN ANTH 6
ANTHR-130..CAN ANTH 4
ANTHR-140..CAN ANTH 2
ART-105..CAN ART 8+14
ART-110..CAN ART 20
ART-126..CAN ART 10
ART-140..CAN ART 12
ART-160..CAN ART 18
ART-152..CAN ART 6
ARTHS-195+196..CAN ART 2
ARTHS-196+197..CAN ART 4
BIOCS-130..CAN BIOL 2
BIOCS-139..CAN BIOL 10
BIOCS-140..CAN BIOL 12
BIOCS-146..CAN BIOL 14
BIOCS-130+131..CAN BIOL SEQ A
BIOCS-139+140..CAN BIOL SEQ B
BUS-294..CAN BUS 8+12
BUSAC-186..CAN BUS 2
BUSAC-187..CAN BUS 4
BUSAC-186+187..CAN BUS SEQ A
CHEM-108..CAN CHEM 6
CHEM-109..CAN CHEM 8
CHEM-120..CAN CHEM 2
CHEM-121..CAN CHEM 4
CHEM-120+121..CAN CHEM SEQ A
CHEM-108+109..CAN CHEM SEQ B
CHIN-120..CAN CHIN 2
CHIN-121..CAN CHIN 4
CHIN-220..CAN CHIN 8
CHIN-221..CAN CHIN 10
CHIN-120+121..CAN CHIN SEQ A
CHIN-220+221..CAN CHIN SEQ B
COMSC-100..CAN BUS 6
COMSC-100..CAN CSIS 2
COMSC-210..CAN CSIS 24
COMSC-245..CAN CSIS 6
COMSC-260..CAN CSIS 10
COMSC-265..CAN CSIS 16+22
COMSC-266..CAN CSIS 18
DRAMA-112..CAN DRAM 10
DRAMA-112..CAN DRAM 14
DRAMA-122..CAN DRAM 8
DRAMA-123..CAN DRAM 22
ECOE-124..CAN FCS 14
ECOE-220..CAN ECON 2
ECOE-221..CAN ECON 4
ENGIN-120..CAN ENGR 2
ENGIN-140..CAN ENGR 10
ENGIN-230..CAN ENGR 6+12
ENGIN-240..CAN ENGR 4
ENGIN-255..CAN ENGR 8
ENGL-122..CAN ENGL 2
ENGL-123..CAN ENGL 4
ENGL-222..CAN ENGL 6
ENGL-230..CAN ENGL 8
ENGL-253..CAN ENGL 10
ENGL-252..CAN ENGL 14
ENGL-253..CAN ENGL 16
ENGL-253+254..CAN ENGL SEQ A
ENGL-252+253..CAN ENGL SEQ B
ENGL-262+263..CAN ENGL SEQ C
FRNCH-120..CAN FREN 2
FRNCH-121..CAN FREN 4
FRNCH-220..CAN FREN 8
FRNCH-221..CAN FREN 10
FRNCH-120+121..CAN FREN SEQ A
FRNCH-220+221..CAN FREN SEQ B
GEOL-120..CAN GEOG 2
GEOL-121..CAN GEOG 4
GEOL-120+122..CAN GEOL 2
GEOL-121+124..CAN GEOL 4
GERM-120..CAN GERM 2
GERM-121..CAN GERM 4
GERM-221..CAN GERM 8
GERM-120+121..CAN GERM SEQ A
GERM-220+221..CAN GERM SEQ B
HIST-120..CAN HIST 8
HIST-121..CAN HIST 10
HIST-140..CAN HIST 2
HIST-141..CAN HIST 4
HIST-140+141..CAN HIST SEQ A
HIST-120+121..CAN HIST SEQ B
HSCI-230..CAN KINE/PE 8
ITAL-120..CAN ITAL 2
ITAL-121..CAN ITAL 4
ITAL-220..CAN ITAL 8
ITAL-221..CAN ITAL 10
ITAL-120+121..CAN ITAL SEQ A
ITAL-220+221..CAN ITAL SEQ B
JAPAN-120..CAN JPN 2
JAPAN-121..CAN JPN 4
JAPAN-120+121..CAN JPN SEQ A
JPNAL-110..CAN JPN 4
JPNAL-120..CAN JPN 2
MATH-121..CAN MATH 8
MATH-124..CAN MATH 2
MATH-135..CAN MATH 10
MATH-142..CAN STAT 2
MATH-141..CAN MATH 12
MATH-142..CAN MATH 30+34
MATH-183..CAN MATH 32
MATH-191..CAN MATH 16
MATH-192..CAN MATH 18
MATH-193..CAN MATH 20
MATH-194..CAN MATH 26
MATH-195..CAN MATH 27
MATH-196..CAN MATH 22
MATH-197..CAN MATH 24
MATH-192+193..CAN MATH SEQ B
MATH-192+193+292..CAN MATH SEQ C
MATH-182+183..CAN MATH SEQ D
MUSIC-122..CAN MUS 2
MUSIC-123..CAN MUS 4
MUSIC-151..CAN MUS 24
MUSIC-122+123..CAN MUS SEQ A
MUSLT-110..CAN MUS 10
NUTRI-160..CAN FCS 2
PHILO-120..CAN PHI 2
PHILO-122..CAN PHI 4
PHILO-130..CAN PHI 6
PHILO-224..CAN PHI 8
PHILO-224+225..CAN PHI SEQ A
PHYS-120..CAN PHYS 2
PHYS-121..CAN PHYS 4
PHYS-130..CAN PHYS 8
PHYS-230..CAN PHYS 12
PHYS-231..CAN PHYS 14
PHYS-120+121..CAN PHYS SEQ A
PHYS-130+230+231..CAN PHYS SEQ B
POLSC-121..CAN GOVT 2
PSYCH-210..CAN PSY 2
RUSS-120..CAN RUSS 2
RUSS-121..CAN RUSS 4
RUSS-220..CAN RUSS 8
RUSS-221..CAN RUSS 10
RUSS-120+121..CAN RUSS SEQ A
RUSS-220+221..CAN RUSS SEQ B
SOCIO-120..CAN SOC 2
SOCIO-121..CAN SOC 4
SOCIO-125..CAN FCS 12
SPAN-120..CAN SPAN 2
SPAN-121..CAN SPAN 4
SPAN-220..CAN SPAN 8
SPAN-221..CAN SPAN 10
SPAN-120+121..CAN SPAN SEQ A
SPAN-220+221..CAN SPAN SEQ B
SPCH-120..CAN SPCH 4
SPCH-123..CAN SPCH 6
SPCH-124..CAN DRAM 6
SPCH-128..CAN SPCH 8
Requirements

ARCHIVED
Requirements
for general education, associate degrees and certificates

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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 can 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 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.
These are the 2008-2009 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 100, 110, 255, 265
   English 123, 126
   History 122
   Mathematics 124, 125, 135, 135SP (3 units), 142, 181, 182, 183, 191, 192, 193, 194, 195, 292, 294
   Philosophy 130
   Psychology 145
   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.

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

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, 102
   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, 160
   Art Digital Media 214
   Art History 193, 195, 196, 197, 199
   Broadcast Communication Arts 140, 260
   Dance 201
   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, 112, 113, 114, 115, 116, 117, 118
IV. Social and behavioral sciences

Complete one course from Section A AND one course with a different prefix from Section B, OR a second course of a pair in section A.

A. American Institutions

Complete one course from the following OR a pair**:

History 120 and 121**, 127 and 128**, 170 and 171**
Political Science 121*
Social Science 111*, 120 and 220**

B. Social and behavioral sciences

Complete one course from the following:

Administration of Justice 120
Anthropology 120, 125, 130, 135, 150
Early Childhood Education 124, 130, 144
Economics 101, 200, 220, 221
Geography 130
History 120, 121, 124, 125, 126, 127, 128, 129, 130, 135, 136, 140, 141, 150, 151, 170, 171
Political Science 120, 121, 151, 220, 240, 250
Social Science 110, 111, 115, 120, 123, 125, 160A, 162, 163, 220
Sociology 120, 121, 122, 123, 124, 125, 131, 135, 140

*Meet’s the district’s American Institutions requirement as a single course.
**Must be taken together to satisfy American Institutions AND will satisfy the six-unit requirement for the social and behavioral sciences.

Note: Students planning to transfer to CSU: see CSU general education requirements in U.S. history, Constitutions and American ideals.

V. Physiological and psychological studies

A. Ecology of human health

Course requirement - 3 units
Complete one course from:
Health Science 124, 140, 170
Nutrition 115, 160

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 following physical education courses: 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 130
Anthropology 120*, 135*
Broadcast Communication Arts 260*
Culinary Arts 228
Drama 142*
Early Childhood Education 144
English 162*, 168*, 170*, 173*, 177*, 190*, 225, 262*
Film 160*
Geography 135
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:
Biological Science 130
Career 110
Dental Hygiene 134
Health Science 124
Library Studies 121
Nutrition 120
Physical Education Theory 210

Total general education units = 26-38
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.

Non degree applicable courses
Units from courses numbered below 100 cannot be applied to the degree. Non degree 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 and Records 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.
General degree requirements for entering students
To be awarded the associate degree students must:

- complete the 26-38 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 the English composition and mathematics comprehension requirements;
- complete at least 12 units of degree applicable course work at DVC;
- maintain at least an overall GPA of 2.0 in degree applicable course work;
- complete at least 18 units in a selected major.

DVC career/technical programs
Offering more than 30 career/technical programs and over 50 certificates and degrees, DVC provides students with the educational background and training they need to achieve their career goals. By completing a career/technical 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.

Career/technical certificate and degree programs vary in length; most certificate programs require less than two years of full-time study to complete. Most programs may be completed on a part-time basis. DVC offers two types of certificates; certificates of achievement and certificates of accomplishment requires 17.5 units or less. In some cases, courses completed in a certificate program can be applied to a degree program. Only certificates of achievement and degrees are recorded on the student official transcript.

Students who successfully complete their certificate or degree course work must apply to the Admissions and Records Office to receive their award. 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.
# DVC certificate programs and associate degrees

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* offered in collaboration with Ohlone College, which grants the degree
## Programs and course descriptions

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Understanding 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 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 co-requisite it means that students must be concurrently enrolled in the co-requisite and respective 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 and Records Office before registration. For complete information about prerequisites and co-requisites 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.

Grade 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:

P/NP - The course may only be taken for a pass/no pass grade.

LR - The course may only be taken for a letter grade.

SC - Students may choose P/NP grading before the sixth week of the term. If they do not choose pass/no pass 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) system
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. 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.

Availability of course offerings
The courses listed in the DVC catalog include all of the courses that are currently approved by the college. Every course is not necessarily offered every term.
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
Diane Smith, Interim Dean
Science Center 102
925-685-1230 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
Addiction studies

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 155 satisfies both a major and a DVC general education requirement, however the units are only counted once.

Upon completing this degree, 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 credentials has additional testing and/or field practicum hours required, but all of the educational coursework is completed when you finish the addiction counseling program at DVC.

Addiction counseling course sequence

X= semester offered

<table>
<thead>
<tr>
<th>recommended sequence</th>
<th>units</th>
<th>fall</th>
<th>spring</th>
<th>summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 101 1st year</td>
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<td>ADS 102 1st year</td>
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<td>X</td>
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<td>ADS 103 2nd year</td>
<td>2</td>
<td>X</td>
<td>X</td>
<td></td>
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<tr>
<td>ADS 151 1st year</td>
<td>1.5</td>
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<td></td>
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<tr>
<td>ADS 152 2nd year</td>
<td>3</td>
<td>X</td>
<td></td>
<td>X</td>
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<tr>
<td>ADS 154 1st year</td>
<td>3</td>
<td>X</td>
<td></td>
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<tr>
<td>ADS 155 2nd year</td>
<td>3</td>
<td>X</td>
<td></td>
<td>X</td>
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<tr>
<td>ADS 163 2nd year</td>
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<td>X</td>
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<td>ADS 168 2nd year</td>
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<td>X</td>
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<tr>
<td>ADS 170 1st year</td>
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<td>X</td>
<td></td>
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<tr>
<td>ADS 171 3rd year</td>
<td>5.5</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>ADS 172 3rd year</td>
<td>5.5</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Total units for the major 37.5
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 online 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.
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 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.

Addiction studies course sequence

X= semester offered

<table>
<thead>
<tr>
<th>recommended sequence</th>
<th>units</th>
<th>fall</th>
<th>spring</th>
<th>summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 101 1st year</td>
<td>3</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>ADS 102 1st year</td>
<td>3</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADS 152 2nd year</td>
<td>3</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>ADS 154 1st year</td>
<td>3</td>
<td>X</td>
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<tr>
<td>ADS 155 2nd year</td>
<td>3</td>
<td>X</td>
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<td></td>
</tr>
<tr>
<td>ADS 163 2nd year</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADS 170 1st year</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 101 Introduction to Substance Abuse and Treatment</td>
<td>3</td>
</tr>
<tr>
<td>ADS 102 Introduction to Motivational Interviewing Skills</td>
<td>3</td>
</tr>
<tr>
<td>ADS 103* Group Process</td>
<td>2</td>
</tr>
<tr>
<td>ADS 151* Ethical and Legal Concerns for Addiction Counselors</td>
<td>1.5</td>
</tr>
<tr>
<td>ADS 152* Relapse Prevention</td>
<td>3</td>
</tr>
<tr>
<td>ADS 154* Dual Disorders</td>
<td>3</td>
</tr>
<tr>
<td>ADS 155 Diverse Communities and Social Services</td>
<td>3</td>
</tr>
<tr>
<td>ADS 163 Pharmacology and Medical Aspects of Alcohol and Other Drugs</td>
<td>3</td>
</tr>
<tr>
<td>ADS 168* Group Leadership</td>
<td>2</td>
</tr>
<tr>
<td>ADS 170 Introduction to Codependency and Family Issues</td>
<td>3</td>
</tr>
<tr>
<td>ADS 171* ADS Field Work I</td>
<td>5.5</td>
</tr>
<tr>
<td>ADS 172* ADS Field Work II</td>
<td>5.5</td>
</tr>
</tbody>
</table>

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.

general education requirements ........................................ 26-38
major requirements
ADS 101 Introduction to Substance Abuse and Treatment ......................... 3
ADS 102 Introduction to Motivational Interviewing Skills .......................................................... 3
ADS 152* Relapse Prevention ................................................. 3
ADS 154* Dual Disorders ......................................................... 3
ADS 155 Diverse Communities and Social Services .................................................. 3
ADS 163 Pharmacology and Medical Aspects of Alcohol and Other Drugs ............. 3
ADS 170 Introduction to Codependency and Family Issues .............................................. 3
Total units for the major .................................................. 21
units from a selection of degree applicable courses ............................................. 4-15
Total units for the degree .................................................. 60

*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 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 studies 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 online 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.
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 filled out and turned in to the Admissions and Records 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.

required courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>Prerequisite</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 101</td>
<td>Introduction to Substance Abuse and Treatment</td>
<td>3</td>
<td>ADS 101 or equivalent</td>
<td>eligibility for ENGL 122 or equivalent</td>
</tr>
<tr>
<td>ADS 102</td>
<td>Introduction to Motivational Interviewing Skills</td>
<td>3</td>
<td>ADS 101 or equivalent; ADS 102 or equivalent</td>
<td>ADS 151 or equivalent and ADS 170 or equivalent</td>
</tr>
<tr>
<td>ADS 152*</td>
<td>Relapse Prevention</td>
<td>3</td>
<td>ADS 101 or equivalent and ADS 102 or equivalent</td>
<td>ADS 151 or equivalent and ADS 170 or equivalent</td>
</tr>
<tr>
<td>ADS 154*</td>
<td>Dual Disorders</td>
<td>3</td>
<td>ADS 101 or equivalent and ADS 102 or equivalent</td>
<td>ADS 151 or equivalent and ADS 170 or equivalent</td>
</tr>
<tr>
<td>ADS 155</td>
<td>Diverse Communities and Social Services</td>
<td>3</td>
<td>ADS 101 or equivalent and ADS 102 or equivalent</td>
<td>ADS 151 or equivalent and ADS 170 or equivalent</td>
</tr>
<tr>
<td>ADS 163</td>
<td>Pharmacology and Medical Aspects of Alcohol and Other Drugs</td>
<td>3</td>
<td>ADS 101 or equivalent and ADS 102 or equivalent</td>
<td>ADS 151 or equivalent and ADS 170 or equivalent</td>
</tr>
<tr>
<td>ADS 170</td>
<td>Introduction to Co-dependency and Family Issues</td>
<td>3</td>
<td>ADS 101 or equivalent and ADS 102 or equivalent</td>
<td>ADS 151 or equivalent and ADS 170 or equivalent</td>
</tr>
</tbody>
</table>

Total units required: 21

*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 and 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 or equivalent; ADS 102 or equivalent (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 and 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-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 equivalent ADS 102 or equivalent ADS 170 or equivalent
- Co-requisite: ADS 171 or equivalent (may be taken previously)
- Note: formerly a seven unit block consisting of ADS 169, CARER 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, CARER 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 first-hand 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 accomplishment
Administration of justice - Community relations specialist
Administration of justice - Correctional specialist
Administration of justice - Crime scene investigator
Administration of justice - Criminal law specialist
Administration of justice - Juvenile counseling
Administration of justice - Patrol specialist

Associate in science degree - 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 an associate in science degree, students must complete each required course with a “C” grade or better. Degree requirements can be completed by attending classes in the day, the evening, or both. Certain courses may satisfy both a major and a DVC general education requirement; however the units are only counted once.

Certificate of achievement - 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJUS 120</td>
<td>3</td>
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<tr>
<td>ADJUS 121</td>
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<td>ADJUS 122</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 124</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 130</td>
<td>3</td>
</tr>
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<td>ADJUS 221</td>
<td>3</td>
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<td>ADJUS 284</td>
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plus at least 7-9 units from:

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ADJUS 125</td>
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<td>ADJUS 203</td>
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<td>ADJUS 280</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 298</td>
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</table>

Total units for the major 28-30
Electives
Total units for the degree 60-65
Certificate of accomplishment - 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 accomplishment, 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 accomplishment requirements also counts towards the completion of the AJ certificate of achievement.

Certificate of accomplishment - 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 accomplishment, 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 accomplishment requirements also counts towards the completion of the AJ certificate of achievement.

Certificate of accomplishment - 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 accomplishment, 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 accomplishment requirements also counts towards the completion of the AJ certificate of achievement.
Certificate of accomplishment - 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 accomplishment, 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 accomplishment requirements also counts towards the completion of the AJ certificate of achievement.

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
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</thead>
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<tr>
<td>ADJUS 120 Introduction to the Administration of Justice</td>
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<tr>
<td>ADJUS 121 Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 122 Criminal Procedure</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 221 Criminal Evidence</td>
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</tr>
<tr>
<td><strong>Total units required</strong></td>
<td>12</td>
</tr>
</tbody>
</table>

Certificate of accomplishment - 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 to ensure academy success. Students entering private security will have much 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 accomplishment, 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 accomplishment requirements also counts towards the completion of the AJ certificate of achievement.

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJUS 120 Introduction to the Administration of Justice</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 125 Report Preparation for Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 139 Gangs and Threat Groups in America</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 222 Criminal Investigation</td>
<td>2</td>
</tr>
<tr>
<td>ADJUS 260 Patrol Procedures</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 270 Defensive Tactics and Firearms</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total units required</strong></td>
<td>17</td>
</tr>
</tbody>
</table>

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 interrelationships 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-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 4, 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 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 court 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, memos, and administrative reports. Students will gain practical experience in note-taking, report writing, and presenting testimony in court. CSU

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 gangs 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, glass, 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 ADJ, 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

AET-230 Advanced Photovoltaic Systems
2 units LR
• May be repeated once
• 27 hours lecture/27 hours laboratory per term
• Recommended: AET 130 or equivalent and ELECT 122 or equivalent
This course will cover the National Electrical Code (NEC) specifics concerning photovoltaic installations. The topics include code compliant wiring of modules, inverters, charge controllers, batteries, grounding techniques and related topics. Additional topics include the design and installation of large commercial photovoltaic systems. CSU

Alternate energy technologies – AET

Physical Science and Engineering Division
Dennis Smith, Dean
Physical Science Building 261
925-685-1230 x 2359

Possible career opportunities
An area of increasing job opportunities is in the various fields of alternate or renewable energy. This includes areas related to solar photovoltaics, solar water heating, wind energy systems, biodiesel and biofuels, biomass, fuel cells and related hydrogen energy devices and other small technologies. Most of the jobs in these areas are involved with the installation, design or maintenance of these systems. Most of these areas require skills in electricity, science, and math.
# Anthropology – ANTHR

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

## Possible career opportunities
Anthropology is a basic component for careers like anthropologist, anthropology instructor, museum curator, population analyst, urban planner, social services consultation, and environmental impact analyst. Most career options require more than two years of college study.

### ANTHR-115 Primate Evolution and Adaptation
3 units  SC  
- **Recommended: eligibility for ENGL 122 or equivalent**  
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  
- **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 or equivalent**  
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, 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 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 beyond courses offered

An opportunity for advanced students to pursue special interests under the direction of the faculty. CSU

Arabic – ARABC

ARABC-120 First Term Arabic
5 units SC
- 90 hours lecture/18 hours laboratory by arrangement 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, UC

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, UC

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
**Architecture – ARCHI**

Physical Science and Engineering Division  
Dennis Smith, Dean  
Physical Science Building 261  
925-685-1230 x 2359

**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.

**required courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>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>ARCHI 121</td>
<td>Architectural Design I</td>
<td>4</td>
</tr>
<tr>
<td>ARCHI 130</td>
<td>Architectural Graphics I</td>
<td>3</td>
</tr>
<tr>
<td>ARCHI 131</td>
<td>Architectural Graphics II</td>
<td>3</td>
</tr>
<tr>
<td>ARCHI 220</td>
<td>Architectural Design II</td>
<td>3</td>
</tr>
<tr>
<td>ARCHI 221</td>
<td>Architectural Design III</td>
<td>3</td>
</tr>
<tr>
<td>ARCHI 222</td>
<td>Architectural Working Drawings I</td>
<td>3</td>
</tr>
<tr>
<td>ARCHI 223</td>
<td>Architectural Working Drawings II</td>
<td>3</td>
</tr>
<tr>
<td>CONST 135</td>
<td>Construction Processes (Residential)</td>
<td>4</td>
</tr>
<tr>
<td>CONST 144</td>
<td>Materials of Construction</td>
<td>3</td>
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<tr>
<td>CONST 273</td>
<td>Construction Management</td>
<td>3</td>
</tr>
<tr>
<td>ENGIN 239</td>
<td>Statics and Strength of Materials</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 110</td>
<td>Elementary Physics</td>
<td>3</td>
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**plus at least 3 units from:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>ARCHI 155</td>
<td>History of Architecture: Europe and World</td>
</tr>
<tr>
<td>ARCHI 160</td>
<td>History of American Architecture</td>
</tr>
</tbody>
</table>

**plus at least 4 units from:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>ENGIN 111</td>
<td>Mathematics for Technicians</td>
</tr>
<tr>
<td>MATH 120</td>
<td>Intermediate Algebra</td>
</tr>
</tbody>
</table>

**plus at least 2-3 units from:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>CONST 116</td>
<td>Surveying Related to Construction</td>
</tr>
<tr>
<td>ENGIN 140</td>
<td>Plane Surveying I</td>
</tr>
</tbody>
</table>

**Total units required**  
52-53

**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**

4 units SC  
- **54 hours lecture/54 hours laboratory/36 hours laboratory by arrangement per term**
- **Recommended: ARCHI-120 or equivalent and ARCHI 130 or equivalent**
  First level studio design class in 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 architectural 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 (credit limits may apply to UC - see counselor)

**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 include: lettering, perspective, paraline 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**

4 units SC  
- **54 hours lecture/54 hours laboratory/36 hours laboratory by arrangement per term**
- **Prerequisite: ARCHI 130 or equivalent**
  Advanced exploration of drafting techniques utilizing freehand and mechanical drafting methods of representation. Emphasis on perspective drawing, shade and tone, color theory, 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  Digital Tools for Architecture
4 units  SC
- 36 hours lecture/72 hours laboratory/36 hours laboratory by arrangement per term
An introduction to the use of computers in architectural design and representation. Course covers topics in presentation graphics, digital modeling and digital portfolio design. Students will be introduced to a variety of software packages for graphic presentations and design, web authoring and publication, and three dimensional modeling. 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
- Prerequisite: ARCHI 120 and 130 or equivalent
Second level studio design class continuing the study of architectural design. Course focuses on development of fundamental design skills utilizing concepts related to site planning and site analysis, spatial qualities of architecture and movement through architectonic space. Continuing investigation of topics in material qualities, general methods of assembly and construction, and human factors in design. Methods of presentation and design development include drawing, model making and architectural reviews and critiques. 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
- Prerequisite: ARCHI 220 or equivalent
Third 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. Projects will also explore concepts in human, cultural, historical and advanced structural and circulation systems in architectural design. 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
### Architecture

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Type</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ARCHI-226</td>
<td>Computer Aided Drafting Design, Advanced Concepts - AutoCAD</td>
<td>4</td>
<td>LR</td>
<td>54/36</td>
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<tr>
<td>Architec</td>
<td>May be repeated once</td>
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<tr>
<td></td>
<td>54 hours lecture/36 hours laboratory by arrangement per term</td>
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<tr>
<td></td>
<td>Recommended: ARCHI 126 or ENGIN 126 or equivalent</td>
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</tbody>
</table>
| 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 and photo realistic rendering, (2) customization and optimal application of AutoCAD and (3) utility options for presentation purposes and project management. CSU, UC (credit limits may apply to UC - see counselor).

### ARCHI-298 Independent Study

<table>
<thead>
<tr>
<th>Units</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>.5-3</td>
<td>SC</td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>May be repeated three times</td>
<td></td>
</tr>
<tr>
<td>Variable hours</td>
<td></td>
</tr>
<tr>
<td>Prerequisite: submission of acceptable educational contract to department and instruction office; topics must extend study beyond courses offered</td>
<td></td>
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<tr>
<td>Selected students may pursue independent study and development of projects under guidance of faculty. CSU</td>
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### Architec

#### ART-105A Introduction to Drawing

<table>
<thead>
<tr>
<th>Units</th>
<th>Type</th>
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<tr>
<td>1.5</td>
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<tr>
<td>18 hours lecture/36 hours laboratory per term</td>
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<tr>
<td>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</td>
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<tr>
<td>Presentation of fundamentals of drawing and composition and the basic application thereof. CSU, UC</td>
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#### ART-105B Introduction to Color

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<td>18 hours lecture/36 hours laboratory per term</td>
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<tr>
<td>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</td>
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<tr>
<td>Presentation of the fundamentals of color theory, color function, and color application. CSU, UC</td>
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</table>

#### ART-106 Drawing and Composition

<table>
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<th>Units</th>
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<td>36 hours lecture/72 hours laboratory per term</td>
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<tr>
<td>Recommended: ART 105 or equivalent; eligibility for ENGL 116/118</td>
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<tr>
<td>An exploration of drawing concepts, descriptive drawing, and logical form rendering with an emphasis on stylistic development. May explore additional color media such as pastel and prismacolor pencils. CSU, UC</td>
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#### ART-106A Drawing and Composition: Expressive

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<th>Units</th>
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<td>18 hours lecture/36 hours laboratory per term</td>
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<tr>
<td>Recommended: ART 105 or equivalent; eligibility for ENGL 116/118</td>
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<tr>
<td>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</td>
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#### ART-106B Drawing and Composition: Controlled

<table>
<thead>
<tr>
<th>Units</th>
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<td>May be repeated once</td>
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<tr>
<td>18 hours lecture/36 hours laboratory per term</td>
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<tr>
<td>Recommended: ART 105A or equivalent; eligibility for ENGL 116/118</td>
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<tr>
<td>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</td>
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</tbody>
</table>

### Art – ART

Applied and Fine Arts Division

Michael Almaguer, Interim Dean

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, ceramicist, 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

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<td>May be repeated once</td>
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<tr>
<td>36 hours lecture/72 hours laboratory per term</td>
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<tr>
<td>Recommended: eligibility for ENGL 116/118 or equivalent</td>
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<tr>
<td>Note: ART 105A and 105B combined are equal to ART 105.</td>
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<tr>
<td>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</td>
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</table>

#### ART-106A Drawing and Composition: Expressive

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<th>Units</th>
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<td>18 hours lecture/36 hours laboratory per term</td>
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<tr>
<td>Recommended: ART 105 or equivalent; eligibility for ENGL 116/118</td>
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<tr>
<td>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</td>
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</table>

#### ART-106B Drawing and Composition: Controlled

<table>
<thead>
<tr>
<th>Units</th>
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<tbody>
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<tr>
<td>18 hours lecture/36 hours laboratory per term</td>
<td></td>
</tr>
<tr>
<td>Recommended: ART 105A or equivalent; eligibility for ENGL 116/118</td>
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</tr>
<tr>
<td>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</td>
<td></td>
</tr>
</tbody>
</table>
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, and ART 107 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, 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
The study of 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-120  Watercolor 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 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
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>SC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART-126</td>
<td>Oil/Acrylic Painting I</td>
<td>3</td>
<td>SC</td>
<td>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</td>
</tr>
<tr>
<td>ART-126A</td>
<td>Introduction to Oil/Acrylic Painting A</td>
<td>1.5</td>
<td>SC</td>
<td>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</td>
</tr>
<tr>
<td>ART-126B</td>
<td>Introduction to Oil/Acrylic Painting B</td>
<td>1.5</td>
<td>SC</td>
<td>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</td>
</tr>
<tr>
<td>ART-127</td>
<td>Oil/Acrylic Painting II</td>
<td>3</td>
<td>SC</td>
<td>36 hours lecture/72 hours laboratory per term, Recommended: ART 105 or equivalent, ART 125, and ART 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</td>
</tr>
<tr>
<td>ART-128</td>
<td>Symbols and Visions</td>
<td>3</td>
<td>SC</td>
<td>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</td>
</tr>
<tr>
<td>ART-129</td>
<td>Advanced Painting</td>
<td>3</td>
<td>SC</td>
<td>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</td>
</tr>
<tr>
<td>ART-135</td>
<td>Art Gallery/Museum Management</td>
<td>3</td>
<td>SC</td>
<td>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</td>
</tr>
<tr>
<td>ART-140</td>
<td>Introduction to Sculpture and 3-D Design</td>
<td>3</td>
<td>SC</td>
<td>May be repeated once, 36 hours lecture/72 hours laboratory per term, Recommended: 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</td>
</tr>
<tr>
<td>ART-141</td>
<td>Sculpture I</td>
<td>3</td>
<td>SC</td>
<td>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</td>
</tr>
<tr>
<td>ART-142</td>
<td>Metal Art I</td>
<td>3</td>
<td>SC</td>
<td>May be repeated once, 36 hours lecture/72 hours laboratory per term, Recommended: ART 140; 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</td>
</tr>
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</table>
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 and ART 142 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 142 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 I  
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-147  Metalsmithing and Jewelry II  
3 units  SC  
- May be repeated once  
- 36 hours lecture/72 hours laboratory per term  
- Recommended: ART 146 or equivalent  
This is an advanced Metalsmithing/Jewelry course with emphasis on hands-on processes. It provides further exploration of traditional and contemporary metalsmithing design and aesthetics. Students participate in discussions of career paths, gallery affiliations, exhibitions and competitions, object photography, and portfolio preparation. A variety of techniques such as advanced chainmaking, advanced stone setting, anticlastic and synclastic forming and raising, chasing, repousse, mold-making, alternative casting, Mokume Gane, and reticulation are introduced along with emphasis of individual design and concept. CSU

ART-150  Topics in Studio Art  
1.5-3 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

ART-152  Wheel-Thrown Ceramics I  
3 units  SC  
- May be repeated once  
- 36 hours lecture/72 hours laboratory by arrangement 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 by arrangement per term  
- Recommended: 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 two times  
- 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 two times
- 36 hours lecture/72 hours laboratory per term
- Recommended: eligibility for ENGL 116/118
An exploration of sculptural form through the use of the ceramic 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 two times
- 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 firing techniques. Students will be introduced to a broad range of aesthetic styles and philosophies relevant to the human form. CSU, UC

ART-160  Photography I
3 units  SC
- 36 hours lecture/72 hours laboratory per term
- Recommended: eligibility for ENGL 122 or equivalent
- Note: students supply 35mm single lens reflex camera
An introductory photography class that offers students a working knowledge of the basics of traditional black and white darkroom photography including history, theory and practice. This course will emphasize the technical aspects of black and white photography. Students will also explore the historical context of art and photography. Class critiques will be used to analyze and discuss photographic images. 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 composition, 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 personal 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, eligibility for ENGL 116/118 or equivalent
- Note: students supply cameras
Intermediate level course in which students participate in field trips, in-class lectures, demonstrations, critiques, and studio time in order to develop their own documentary photo essays. The main emphasis will be on documentary photography, its definition, historical precedents, and image making. This course is appropriate for students in art, journalism, and communication. 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 subdivisions. Specific topics will be announced in the schedule of courses. CSU

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 literacy 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 aesthetic 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 faculty. CSU
Art digital media – ARTDM

Art applied and fine arts division
Michael Almaguer, Interim Dean
Humanities Building 112 and 113
925-685-1230 x 2312

Possible career opportunities
Digital media or graphic design jobs cover all ends of the creative spectrum. Some possible career options include website designer/developer, multimedia designer, computer-graphic artist, animator and cartoonist, interface designer, instructional designer, production artist, video specialist, audio specialist, multimedia programmer, technical writer, informational designer, multimedia company executive, internet consultant, and computer game designer.

Associate in arts
Art digital media

Certificates of achievement
Art digital media - Character animation
Art digital media - Digital audio
Art digital media - Digital imaging
Art digital media - Motion graphics
Art digital media - 3D Modeling and animation
Art digital media - Web design

Certificate of accomplishment
Art digital media - Foundation

Associate in arts - Art digital media
The art digital media associate in arts program prepares students for entry level employment in one of six specialty areas of the multimedia industry: character animation, digital imaging, web design, motion graphics, 3D animation, and digital audio. 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 an associate in arts 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 general education and major requirement; however, the units are only counted once.

General education requirements

Units

Major requirements
ART 105 Introduction to Drawing, Color, and 2D Design.................................3
ARTDM 110 Digital Imaging Process and Technique I.........................1.5
ARTDM 111 Digital Imaging Process and Technique II.........................1.5
ARTDM 130 Introduction to Digital Audio........................................1.5
ARTDM 149 Introduction to Digital Video........................................1.5
ARTDM 190 Projects in Multimedia..................................................3
ARTDM 191 Multimedia Portfolio Development.................................3

Choose 8-9 units from one of the following six specialty areas:

Character animation
ART 107 Figure Drawing I.............................................................3
ARTDM 165 Cartoon Drawing for Digital Animation.........................3
ARTDM 170 Multimedia for Web Delivery........................................3

Digital audio
MUSIC 172 Introduction to Electronic Music and MIDI....................3
MUSIC 173 Advanced Electronic Music..........................................3
MUSIC 174 Introduction to ProTools..............................................3

Digital imaging
ARTDM 112 Digital Imaging for the Artist.......................................3
ARTDM 214 Introduction to Graphic Design....................................3
ARTDM 115 Digital Imaging Process and Technique III....................3

Motion graphics
ARTDM 140 Motion Graphics for Digital Media...............................3
ARTDM 145 Intermediate Digital Video Production..........................3
ARTDM 170 Multimedia for Web Delivery........................................3

3D modeling and animation
ARTDM 160 3D Modeling and Animation I....................................3
ARTDM 161 3D Modeling and Animation II....................................3
ARTDM 165 Cartoon Drawing for Digital Animation.........................3

Web design
ARTDM 170 Multimedia for Web Delivery........................................3
ARTDM 171 Web Design..................................................................3
COMSC 095 WWW Publishing with HTML....................................1
COMSC 096 Advanced WWW Publishing........................................1

Plus at least 9 units from:
ART 106 Drawing and Composition..................................................3
ART 107 Figure Drawing I..............................................................3
ART 125 Color Theory and Its Application to 2-D Media......................3
ARTDM 100 Introduction to Multimedia Workstations.....................1
ARTDM 112 Digital Imaging for the Artist.......................................3
ARTDM 115 Digital Imaging Process and Technique III....................3
ARTDM 117 Digital Illustration........................................................3
ARTDM 120 Interactive Authoring for Multimedia............................3
ARTDM 140 Motion Graphics for Digital Media...............................3
ARTDM 145 Intermediate Digital Video Production..........................3
ARTDM 160 3D Modeling and Animation I....................................3
ARTDM 161 3D Modeling and Animation II....................................3
ARTDM 165 Cartoon Drawing for Digital Animation.........................3
Certificate of achievement - Art digital media

The art digital media 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 industry design and production process. Additionally, students will explore 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>ARTDM 110</td>
<td>Digital Imaging Process and Technique I</td>
<td>1.5</td>
</tr>
<tr>
<td>ARTDM 111</td>
<td>Digital Imaging Process and Technique II</td>
<td>1.5</td>
</tr>
<tr>
<td>ARTDM 130</td>
<td>Introduction to Digital Audio</td>
<td>1.5</td>
</tr>
<tr>
<td>ARTDM 149</td>
<td>Introduction to Digital Video</td>
<td>1.5</td>
</tr>
<tr>
<td>ARTDM 190</td>
<td>Projects in Multimedia</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 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>
<th>Course Code</th>
<th>Course Title</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 107</td>
<td>Figure Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 165</td>
<td>Cartoon Drawing for Digital Animation</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 166</td>
<td>Intermediate Cartoon Drawing for Digital Animation</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 170</td>
<td>Multimedia for Web Delivery</td>
<td>3</td>
</tr>
</tbody>
</table>

Digital audio

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTDM 131</td>
<td>Audio Production for Digital Media</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>Advanced Electronic Music</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 174</td>
<td>Introduction to Pro Tools</td>
<td>3</td>
</tr>
</tbody>
</table>

Digital imaging

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTDM 112</td>
<td>Digital Imaging for the Artist</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 214</td>
<td>Introduction to Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 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>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTDM 140</td>
<td>Motion Graphics for Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 145</td>
<td>Intermediate Digital Video Production</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 170</td>
<td>Multimedia for Web Delivery</td>
<td>3</td>
</tr>
</tbody>
</table>

3D modeling and animation

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTDM 160</td>
<td>3D Modeling and Animation I</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 161</td>
<td>3D Modeling and Animation II</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 165</td>
<td>Cartoon Drawing for Digital Animation</td>
<td>3</td>
</tr>
</tbody>
</table>

Web design

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTDM 170</td>
<td>Multimedia for Web Delivery</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 171</td>
<td>Web Design</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>
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</tbody>
</table>

plus at least 9 units from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>units</th>
</tr>
</thead>
<tbody>
<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 125</td>
<td>Color Theory and Its Application to 2-D Media</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 100</td>
<td>Introduction to Multimedia Workstations</td>
<td>1</td>
</tr>
<tr>
<td>ARTDM 112</td>
<td>Digital Imaging for the Artist</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 115</td>
<td>Digital Imaging Process and Technique III</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 117</td>
<td>Digital Illustration</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 120</td>
<td>Interactive Authoring for Multimedia</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 136</td>
<td>Introduction to Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 140</td>
<td>Motion Graphics for Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 145</td>
<td>Intermediate Digital Video Production</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 160</td>
<td>3D Modeling and Animation I</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 161</td>
<td>3D Modeling and Animation II</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 165</td>
<td>Cartoon Drawing for Digital Animation</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 166</td>
<td>Intermediate Cartoon Drawing for Digital Animation</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: There may be no duplication of course units between major specialty area requirements and elective courses.

Total units for the major: 32-33

Total units for the degree: 60-68
Certificate of accomplishment - Art digital media - Foundation

Art digital media is a set of technologies and techniques that can be used to enhance the presentation of information. Art digital media 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 accomplishment, 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.

Total units required 32-33

Note: There may be no duplication of course units between specialty area requirements and elective courses.

ARTDM-100 Introduction to Multimedia Workstations

1 unit SC
1.5 units 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

ARTDM-110 Digital Imaging Process and Technique I

1.5 units SC
18 hours lecture/9 hours laboratory/18 hours laboratory by arrangement per term
Note: basic computer editing and file management skills
This course covers basic design concepts, processes, and aesthetic interpretation of making digital imagery. The course will provide students with experience creating computer graphics and with experience in editing digital images from scanned photographs and digital photography. CSU

ARTDM-111 Digital Imaging Process and Technique II

1.5 units SC
May be repeated once
18 hours lecture/9 hours laboratory/18 hours laboratory by arrangement per term
Recommended: MULTM 110 or ARTDM 110 or equivalent
This course builds on the introductory concepts of digital imaging and covers design concepts, processes, and aesthetic interpretation of making digital imagery. Students will learn advanced digital imaging techniques and will be further exposed to design and composition. CSU

ARTDM-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; eligibility for ENGL 116/118 or equivalent
Formerly ART 112
This course 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

ARTDM-115 Digital Imaging Process and Technique III

3 units SC
May be repeated once
36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term
Recommended: MULTM 111 or ARTDM 111 or equivalent
This intermediate digital imaging course builds on the foundation learned in ARTDM 111. The deeper and more complex topics of digital imaging will be covered. Students will explore digital imaging for interface design as well as the creation of graphics for print, web, video, motion graphics and interactive CD/DVD content. Design and content will be stressed. Topics will include advanced image compositing, advanced color correction, filters, vectors, and text. CSU
ARTDM-117 Digital Illustration  
3 units SC  
• May be repeated once  
• 36 hours lecture/54 hours laboratory per term  
• Recommended: MULTM 110 or ARTDM 110 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 printing, multimedia presentation and the web. Instruction will utilize a variety of software programs including Adobe Illustrator and Macromedia Freehand. CSU

ARTDM-120 Interactive Authoring for Multimedia  
3 units SC  
• May be repeated once  
• 36 hours lecture/54 hours laboratory per term  
• Recommended: MULTM 110 or ARTDM 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

ARTDM-130 Introduction to Digital Audio  
1.5 units SC  
• May be repeated once  
• 18 hours lecture/9 hours laboratory/18 hours laboratory by arrangement per term  
• Note: 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, DVDs, video and the Internet. The course will involve hands-on work with a variety of digital workstations and multimedia software applications. CSU

ARTDM-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 ARTDM 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

ARTDM-136 Beginning Digital Photography  
3 units SC  
• May be repeated once  
• 36 hours lecture/72 hours laboratory per term  
• Recommended: ART 116 or equivalent  
• Note: Students must have digital camera with manual functions  
This introductory course focuses on the required skills to create effective digital photography using digital cameras. Students will be introduced to color correction, retouching, and compositing techniques, as well as digital capture, scanning and printing techniques with a specific focus on digital photographic practice in fine art. CSU, UC

ARTDM-140 Motion Graphics for Digital Media  
3 units SC  
• May be repeated once  
• 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term  
• Recommended: MULTM 110 or ARTDM 110 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

ARTDM-145 Intermediate Digital Video Production  
3 units SC  
• May be repeated once  
• 36 hours lecture/54 hours laboratory per term  
• Recommended: MULTM 149 or ARTDM 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 acquisition. Students will script projects that will be further developed through work on storyboards and camera techniques. This course will involve hands-on work with a variety of digital software application programs. CSU

ARTDM-149 Introduction to Digital Video  
1.5 units SC  
• May be repeated once  
• 18 hours lecture/9 hours laboratory/18 hours by arrangement per term  
• Note: 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 DVDs, interactive computer presentations, and the Internet. The course will involve hands-on work with a variety of digital workstations and multimedia software applications. CSU

ARTDM-150 Topics in Digital Media  
.5-4 units SC  
• May be repeated three times  
• Variable hours  
Supplementary topics to the digital media curriculum designed to provide a study of current concepts and problems in multimedia. Specific topics will be announced. CSU

ARTDM-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 ARTDM 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, surfaced and texturing, camera and lighting, and animation software tools. The course will involve hands-on work with a variety of digital workstations and multimedia software applications. CSU

ARTDM-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 ARTDM 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

ARTDM-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 storyboard animations. It is designed to prepare students to develop a particular style of animation in any of a wide variety of other multimedia courses. This course is designed as a good companion to and/or preparation for ARTDM 170 and/or ARTDM 160. CSU

ARTDM-166 Intermediate Cartoon Drawing for Digital Animation
3 units  SC
• May be repeated once
• 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term
• Recommended: ART 105 or equivalent

Students will be able to prepare a “story bible” that addresses fluidity of movement, multiple visual perspectives, and creating a unified cast of characters. Through a series of projects and experiments we will explore the above subjects and discover how to create an animator’s “story bible.” CSU

ARTDM-170 Animation and Interactivity
3 units  SC
• May be repeated once
• 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term
• Recommended: MULTM 110 or ARTDM 110 or equivalent

This course will provide an introduction to animated 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 non-linear, 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

ARTDM-171 Web Design
3 units  SC
• May be repeated once
• 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term
• Recommended: MULTM 110 or ARTDM 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. CSU

ARTDM-175 Flash Interactivity
3 units  SC
• May be repeated once
• 36 hours lecture/54 hours laboratory per term
• Recommended: MULTM 170 or ARTDM 170 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

ARTDM-190 Digital Media Projects
3 units  SC
• May be repeated three times
• 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term
• Recommended: ART 105, MULTM/ARTDM 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, tools, 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

ARTDM-191 Multimedia Portfolio Development
3 units  SC
• May be repeated once
• 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term
• Recommended: ART 105, MULTM/ARTDM 110, 111, 130, 149 or equivalents

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 view professional portfolios and present their own portfolios to their class peers. CSU
ARTDM-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, tools, 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

ARTDM-214 Introduction to Graphic Design
3 units SC
- May be repeated once
- 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term
- Recommended: eligibility for ENGL 122 or equivalent
- Formerly BUSGR 214
Fundamentals of graphic design including history, theory and practice. Students will use graphic design as a means of communicating ideas in a digital environment. Specific focus will be given to principles of design: balance and visual hierarchy; integration of text and image. Students will survey the history of 20th century design as a basis for exploring and understanding graphic design fundamentals. CSU, UC

ARTDM-224 Typography
3 units SC
- May be repeated once
- 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term
- Recommended: eligibility for ENGL 122 or equivalent
- Formerly BUSGR 224
Fundamentals of typography including history, theory, and practice, study of letterforms and type design. Emphasis on the vocabulary of typographic form and its relationship to message and purpose. CSU, UC

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-196 History of Medieval and Renaissance Art
3 units SC
- 54 hours lecture per term
- Recommended: eligibility for ENGL 116/118
A history of Western art from the Early Christian Period through the Renaissance. Stylistic changes are related to significant social and cultural changes. Consideration is given to the changing role of the artist. CAN ART 2, CAN ART 4, ARTHS 195+196+197=CAN ART SEQ A, CSU, UC

ARTHS-197 History of Baroque to Early 20th Century Art
3 units SC
- 54 hours lecture per term
- Recommended: eligibility for ENGL 116/118
A history of Western art from the 17th century to early 20th century. Stylistic changes are related to significant social and cultural changes. Consideration is given to the changing role of the artist. CAN ART 4, ARTHS 195+196+197=CAN ART SEQ A, UC, CSU

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-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

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 or equivalent
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
• Prerequisite: 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
1.5-3 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

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.

Biological and Health Sciences Division
Diane Smith, Interim Dean
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 With Lab
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 P/NP
- 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 NUTR 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

### 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, 130, 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 With Lab
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, 130, 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 Cellular and Molecular
5 units SC
- 54 hours lecture/108 hours biology 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 Organismal Biology, Evolution and Ecology
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 one semester 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 mechanisms in 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

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 P/NP
- 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 experiences 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 P/NP
- May be repeated once
- Variable hours
- Prerequisite: BIOSC 120 or BIOSC 139 or equivalent
- Formerly BIOSC 141

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 study 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

**Broadcast communication arts – BCA**

Applied and Fine Arts Division
Michael Almaguer, Interim Dean
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

**Certificate of accomplishment**
Broadcast communication arts - Basic digital field production
Broadcast communication arts - Basic studio production
Broadcast communication arts - Basic writing for digital medium
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 ................................................. | 26-38 |
| major requirements                                               |     |
| ARTDM 110 Digital Imaging Process and Technique I ..................... | 1.5  |
| BCA 120 Introduction to Television Production Techniques ............. | 3    |
| BCA 125 Introduction to Digital Film Style Production .................. | 3    |
| BCA 130 Intermediate TV Studio Production ................................ | 3    |
| BCA 140 History of Broadcasting ........................................... | 3    |
| BCA 165 Digital Video Editing ............................................... | 3    |
| plus at least 6 units from:                                       |     |
| ARTDM 111 Digital Imaging Process and Technique II ..................... | 1.5  |
| ARTDM 115 Digital Imaging Process and Technique III .................... | 3    |
| ARTDM 149 Introduction to Digital Video ................................... | 1.5  |
| ARTDM 170 Multimedia for Web Delivery .................................... | 3    |
| BCA 126 Intermediate Digital Field Production .......................... | 3    |
| BCA 132 Advanced TV Studio Production .................................... | 3    |
| BCA 166 Intermediate Digital Editing ...................................... | 3    |
| BCA 190 Topics in Broadcast Communication Arts .......................... | 3    |
| BCA 260 American Ethnic Images in Television ............................. | 3    |
| BCA 298 Independent Study .................................................. | 3    |
| BUSMG 191 Small Business Management ...................................... | 3    |
| BUSMG 192 Entrepreneurship and Venture Management ...................... | 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    |
| FILM 180 Comparative Film Studies ....................................... | 3    |
| FILM 280 Introduction to Film: American Cinema - 1900 to 1950 ......... | 3    |
| FILM 281 Introduction to Film: World Cinema - 1900 to 1960 ............. | 3    |
| FILM 282 Introduction to Film: American Cinema - 1950 to the Present | 3    |
| FILM 283 Introduction to Film: World Cinema - 1960-Present ............. | 3    |
| FILM 290 Film and TV Script Writing ...................................... | 3    |
| FILM 292 Fundamentals of Film Making - Beginning ....................... | 3    |
| FILM 293 Fundamentals of Film Making - Intermediate .................... | 3    |
| SPCH 148 Performance of Literature ....................................... | 3    |
| Total units for the major .................................................. | 31.5  |
| electives                                                         |     |
| units from a selection of degree applicable courses .................... | 0-4.5 |
| Total units for the degree ................................................ | 60-63.5 |

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 online 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>units</th>
<th>fall</th>
<th>spring</th>
<th>summer</th>
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<tbody>
<tr>
<td>ARTDM 110</td>
<td>4th semester</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>ARTDM 195</td>
<td>4th semester</td>
<td>3</td>
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<tr>
<td>BCA 120</td>
<td>1st semester</td>
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<tr>
<td>BCA 125</td>
<td>3rd semester</td>
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<td>BCA 130</td>
<td>2nd semester</td>
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<td>BCA 140</td>
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<td>BCA 150</td>
<td>4th semester</td>
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<tr>
<td>BCA 165</td>
<td>2nd semester</td>
<td>3</td>
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<tr>
<td>COOP 170</td>
<td>4th semester</td>
<td>3</td>
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<tr>
<td>JRNL 110</td>
<td>3rd semester</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective coursework</td>
<td>2nd - 3rd semester</td>
<td>6</td>
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</table>

#### Certificate of achievement - Broadcast communication arts

This program prepares 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.

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.

To earn a certificate of achievement, 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.

#### Required courses

- **ARTDM 110** Digital Imaging Process and Technique I ...... 1.5
- **BCA 120** Introduction to Television Production Techniques ........................................... 3
- **BCA 125** Introduction to Digital Film Style Production ........................................... 3
- **BCA 130** Intermediate TV Studio Production .................................................. 3
- **BCA 140** History of Broadcasting .................................................. 3
- **BCA 165** Digital Video Editing ........................................ 3

#### Plus at least 3 units from:

- **BCA 290** Beginning Writing for Digital Media ....................... 3
- **JRNL 110** Mass Media of Communication .............................. 3

#### Plus at least 3 units from:

- **BCA 110** Introduction to Radio Production .......................... 3
- **BCA 126** Intermediate Digital Field Production .................. 3
- **BCA 132** Advanced TV Studio Production .......................... 3
- **BCA 150** Music Video Production ...................................... 3
- **BCA 166** Intermediate Digital Editing ............................... 3

### Certificate of accomplishment - Broadcast communication arts - Basic digital field production

The broadcast communication arts program prepares students for entry level in one of four specialty areas of broadcasting industry; studio production, field production, post production and writing.
To earn a certificate of accomplishment, 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.

**Certificate of accomplishment - Broadcast communication arts - Basic writing for digital medium**

The broadcast communication arts program prepares students for entry level in one of four specialty areas of broadcasting industry: studio production, field production, post production, and writing.

To earn a certificate of accomplishment, 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.

**Certificate of accomplishment - Broadcast communication arts - Basic studio production**

The broadcast communication arts program prepares students for entry level in one of four specialty areas of broadcasting industry: studio production, field production, post production, and writing.

To earn a certificate of accomplishment, 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.

**BBA-110 Introduction to Radio Production**

3 units SC
- **54 hours lecture per term**
- **Recommended: eligibility for ENGL 122 or equivalent**

Theoretical and practical aspects of sound, acoustics, and audio signal flow in radio, television, and recording operations. Students will learn radio announcing, voice-over techniques, vocal characterization, as well as writing for radio. Includes aesthetic considerations of sound mixing in broadcasting applications, production procedures, and student projects utilizing control consoles, microphones, tape, and digital recording and computerized audio editing. CSU

**BBA-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-125  Introduction to Digital Film Style Production  
3 units  SC  
• 54 hours lecture per term  
• Prerequisite: BCA 120 or equivalent  
• Recommended: eligibility for ENGL 122 or equivalent  
Technical and aesthetic elements of small format television field production; videotape recording and editing; lighting and sound for remote production; program preplanning, production and post-production. Emphasis on program conceptualization, design and production. CSU

BCA-126  Intermediate Digital Field Production  
3 units  SC  
• 54 hours lecture per term  
• Prerequisite: BCA 125 or equivalent  
A course designed to increase the students’ 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  Digital Video Editing  
3 units  SC  
• 54 hours lecture per term  
• Prerequisite: BCA 165 or equivalent  
• 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 Digital 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 digital 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 Digital 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 digital 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. CSU

Business – BUS

Business Division
Krista Johns, Dean
Business and Foreign Language Building 204
925-685-1230 x 2199

Associate in arts degree
Business-transfer

Certificate of achievement
Business - core transfer

Certificate of accomplishment
Business essentials

Associate in arts - Business - transfer
This curriculum is designed to provide an opportunity for the business major to achieve an associate in arts degree in business-transfer while completing the first and second year requirements for transfer to a four-year institution. A baccalaureate degree is recommended preparation for those considering professional careers in business. Completion of this curriculum will demonstrate commitment to the field and provide comprehensive preparation for upper-division work.

Although the associate degree recognizes the completion of lower division general education requirements, it does not guarantee admission to a specific college or university nor does it guarantee admission to a specific major. Some majors and colleges or universities may require different lower division preparation and/or a higher GPA than is necessary for this associate degree.

Students who intend to transfer must meet all current transfer requirements including minimum GPA. 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.

Note: a student may be awarded an associate degree in this major without being fully eligible for transfer.

To earn an associate 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; complete Diablo Valley College general education requirements; complete any elective courses to complete a minimum of 60 units; complete all graduation requirements; and complete at least 25% of all major coursework at Diablo Valley College. Certain courses may satisfy both a major and a DVC general education requirement; however, the units are only counted once.


general education requirements........................................26-38
major requirements
BUSAC 186 Principles of Accounting I..........................4
BUSAC 187 Principles of Accounting II ..................4
ECON 220 Principles of Macroeconomics .................3
ECON 221 Principles of Microeconomics ..................3
MATH 182 Calculus for Management, Life Science and Social Science I ..................................3

plus a minimum of 3 units from:
BUS 240 Business Statistics ........................................3
MATH 142 Elementary Statistics with Probability ......4

plus a minimum of 3 units from:
BUS 109 Introduction to Business .........................3
BUS 294 Business Law ...........................................3

Total units for the major 23

Electives
units from a selection of degree applicable courses............5-16
Total units for the degree 60

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

Certificate of achievement - Business - core transfer

This curriculum prepares the student for entry into business related professional programs or jobs that do not require degrees. Certificate requirements provide a strong general business foundation for employment in business administration, accounting, management, marketing, finance, international
business, or other business related area. Additionally, it completes most, of not all, of the undergraduate business major requirements for transfer should a student decide to transfer prior to completing all the requirements for the DVC associate in arts degree in Business-transfer; or decide to complete the lower division general education requirements and transfer to a four-year institution at a later time. This certificate provides a core curriculum for employment in business or for the further study of business.

To earn a certificate of achievement students must complete each course used to meet a certificate requirement with a “C” grade or better; maintain an overall GPA of 2.5 or better in the coursework required for the certificate; and complete at least 25% of all coursework at Diablo Valley College.

Certificate of accomplishment - Business
essentials
This certificate of accomplishment provides basic business knowledge for obtaining entry-level employment in business operations or business management.

To earn a certificate of accomplishment, students must complete the required courses with a “C” grade or better. Certificate requirements may be completed by attending a combination of day and evening classes.

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, 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-107 Business Job Search Skills
1.5 units SC
• 27 hours lecture per term
• Recommended: eligibility for ENGL 122 or equivalent
This course will cover all employment-related aspects of succeeding in a professional job search in business. Students will explore sources of job listings in business; learn how to conduct a successful job search, including searching for positions using traditional and electronic methods, preparing employment documents (resume, cover letter, follow-up messages), and interviewing skills; practice salary negotiation techniques; practice how to receive and respond effectively to constructive criticism during performance reviews; design strategies for advancing in the business environment; and plan methods for resigning from a position with tact. CSU
BUS-150 Topics in Business
3-4 units SC
• May be repeated three times
• Variable hours
A supplement 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-sq, 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 video-conferencing 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 9+12, CSU, UC  

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  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  

BUS-299  Business accounting – BUSAC  
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  
Certificate of accomplishment  
Bookkeeping essentials  
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 Number</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BUSAC 185</td>
<td>Computer Accounting for Business I</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSAC 186</td>
<td>Principles of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>BUSAC 187</td>
<td>Principles of Accounting II</td>
<td>4</td>
</tr>
<tr>
<td>BUSAC 282</td>
<td>Intermediate Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUSIM 145</td>
<td>Business Spreadsheet Applications</td>
<td>2</td>
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plus at least 9 units from:  

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>BUS 294</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUSAC 283</td>
<td>Auditing</td>
<td>3</td>
</tr>
<tr>
<td>BUSAC 284</td>
<td>Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUSAC 285</td>
<td>Federal Income Taxes-Individuals</td>
<td>3</td>
</tr>
<tr>
<td>BUSAC 286</td>
<td>Governmental and Not-for-Profit Accounting</td>
<td>3</td>
</tr>
</tbody>
</table>
Business accounting

plus at least 6 units from:
BUS 109 Introduction to Business .................................. 3
BUS 209 International Business ........................................ 3
BUS 240 Business Statistics ........................................... 3
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 29.5

Certificate of accomplishment - Bookkeeping essentials
This certificate of accomplishment provides basic business knowledge for obtaining entry-level employment in jobs requiring bookkeeping and accounting skills.

To earn a certificate of accomplishment, students must complete the required courses with a “C” grade or better. Certificate requirements may be completed by attending a combination of day and evening classes.

BUSAC-150 Topics in Business Accounting
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: completion of at least one half (1/2) of BUSAC 186 or equivalent; eligibility for ENGL 122

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: eligibility for ENGL 122 or equivalent
• Note: course may be repeated when software program or online filing system changes.

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
4 units SC
• 72 hours lecture per term
• Recommended: eligibility for ENGL 122 or equivalent
• Note: students seeking an introduction to bookkeeping techniques should register for the Applied Accounting 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 2 BUSAC 186+187=CAN BUS SEQ A, CSU, UC

BUSAC-187 Principles of Accounting II
4 units SC
• 72 hours lecture 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
- 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

This is an intermediate level course on the role and responsibility of Certified Public Accountants in the audit of financial statements. Emphasis will be placed on verification of balance sheets and internal control of accounting systems and cycles. Topics include sampling techniques, auditing standards, professional ethics, legal liability, audit reports, and audit programs. CSU

BUSAC-284 Cost Accounting
3 units SC
- 54 hours lecture/18 hours laboratory by arrangement per term
- Prerequisite: 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
- Recommended: BUSAC 186 or equivalent; eligibility for ENGL 122

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 users 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
Certificate of achievement - Office professional essentials

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.

**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.

**Certificate of accomplishment - Office professional essentials**

This certificate of accomplishment provides basic business knowledge and office assistant skills for obtaining entry-level employment in the business office.

To earn a certificate of accomplishment, students must complete the required courses with a "C" grade or better. Certificate requirements may 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>BUS 101 Business English</td>
<td>3</td>
</tr>
<tr>
<td>BUS 103 Applied Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>BUSIM 110 Keyboarding I</td>
<td>3</td>
</tr>
<tr>
<td>Total units required</td>
<td>9</td>
</tr>
</tbody>
</table>

**BUSIM-025 ESL Keyboarding**

1 unit P/NP

- May be repeated once
- Non 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-075 Business Training Workshops-Level I**

.5-1 unit P/NP

- May be repeated once
- Non 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.

**BUSIM-110 Keyboarding I: Beginning Keyboarding/Introduction to Word Processing**

3 units SC

- 36 hours lecture/18 hours laboratory/54 hours laboratory by arrangement per term
- Recommended: eligibility for ENGL 116/118 or equivalent

A beginning course in keyboarding using the touch method. Personal use and prevocational emphasis on acquiring basic keyboarding skills and on producing documents (e-mail, reports, letters, tables, memos) using word processing software. Preparation for learning office production skills. CSU
BUSIM-111  Keyboarding 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  Database Records and Information Management
3 units  SC
- May be repeated once when software is changed or upgraded
- 54 hours lecture/36 hours laboratory by arrangement per term
- Recommended: eligibility for ENGL 122; keyboarding by touch
Beginning course in database records and information management. Course provides basic records management principles applied to various records systems based on ARMA (Association of Records Manager and Administrators) International rules. Current database software will be used to introduce information management functions. 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
.5-3 units  SC
- May be repeated three times
- 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 files, process mail, make travel arrangements, plan meetings, and use the Internet for business research. CSU

Possible career opportunities
The management studies certificate provides career opportunities as an administrative analyst, office manager, small business owner, operations manager, program coordinator, human resources professional, facilities manager, organizational development specialist, branch manager, or shift supervisor.

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.

required courses

<table>
<thead>
<tr>
<th>Course</th>
<th>units</th>
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<tbody>
<tr>
<td>BUSMG 120</td>
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<tr>
<td>BUSMG 121</td>
<td>3</td>
</tr>
<tr>
<td>BUSMG 131</td>
<td>3</td>
</tr>
<tr>
<td>BUSMG 132</td>
<td>3</td>
</tr>
<tr>
<td>BUSMG 194</td>
<td>3</td>
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<tr>
<td>BUSMG 226</td>
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</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.

Required courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>BUS 103</td>
<td>Applied Business Mathematics</td>
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<tr>
<td>BUS 109</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 294</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUSMG 191</td>
<td>Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>BUSMG 192</td>
<td>Entrepreneurship/Venture Management</td>
<td>3</td>
</tr>
<tr>
<td>BUSMG 226</td>
<td>Group Dynamics and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>BUSMK 158</td>
<td>Selling</td>
<td>3</td>
</tr>
<tr>
<td>BUSMK 255</td>
<td>Advertising</td>
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Plus at least 3 units from:

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<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
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<tbody>
<tr>
<td>BUSAC 181</td>
<td>Applied Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUSAC 186</td>
<td>Principles of Accounting I</td>
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</table>

Total units required 27

BUSMG-120 Introduction to Management Studies
3 units SC
- 54 hours lecture per term
- Recommended: eligibility for ENGL 122 or equivalent, BUS 109 or equivalent
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

BUSMG-121 Practices and Concepts of Supervision
3 units SC
- 54 hours lecture per term
- Recommended: eligibility for ENGL 122 or equivalent
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

BUSMG-131 Gender Issues in Management
3 units LR
- 54 hours lecture per term
- Recommended: BUS 109 or equivalent; eligibility for ENGL 122 or equivalent
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, teamwork, discrimination, sexual harassment and family/work balance will be studied in the context of the current diverse workplace. CSU

BUSMG-132 Human Resource Management
3 units SC
- 54 hours lecture per term
- Recommended: BUS 109 or equivalent; eligibility for ENGL 122 or equivalent
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

BUSMG-150 Topics in Management Studies
.3-4 units SC
- May be repeated three times
- Variable hours
- Recommended: BUS 109 or equivalent; eligibility for ENGL 122 or equivalent
A supplemental course in business designed to provide a study of current business problems or activities. CSU

BUSMG-151 Seminars - Employee Behavior
.5 unit P/NP
- 9 hours lecture per term
- Recommended: eligibility for ENGL 122
- Note: seminar topics will vary
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

BUSMG-152 Seminars - Human Resources
.5 unit P/NP
- 9 hours lecture per term
- Recommended: eligibility for ENGL 122
- Note: seminar topics will vary
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
BUSMG-191 Small Business Management
3 units SC
- 54 hours lecture per term
- Recommended: BUS 103 and BUS 109 or equivalent; eligibility for ENGL 122 or equivalent

An introductory course intended for students who want to start a new small business, or are already involved in the ongoing management of an existing small business. Small business owners differ from entrepreneurs in that they often keep their businesses small and do not emphasize rapid growth. A small business is independently owned and operated, and is typically not dominant in its field. This course will cover relevant functional areas such as marketing, finance, and human resources. It will also cover topics unique to small businesses, including managing a family-owned business, becoming a franchise, and applying for a Small Business Administration (SBA) loan. Students will get hands-on small business management experience by designing their own small businesses and putting together a business plan. CSU

BUSMG-192 Entrepreneurship and Venture Management
3 units SC
- 54 hours lecture per term
- Recommended: BUS 103, 109 or equivalent; eligibility for ENGL 122 or equivalent

A course designed for students who want to become entrepreneurs and successfully launch new business ventures. Entrepreneurs’ principle objectives are profitability and growth. They differ from other business owners in that they take more risks, and focus on developing innovative strategic practices and products in high tech and other high-growth sectors. This course will cover the process of successfully launching, managing and growing an entrepreneurial firm, emphasizing opportunity recognition and feasibility analysis. It will also cover important topics such as developing an effective business model, protecting intellectual property and obtaining venture capital financing. Students will get hands-on entrepreneurial experience by designing their own entrepreneurial venture and developing a business plan. CSU

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

BUSMK-257 Applied Advertising and Promotion
3 units SC
- 54 hours lecture per term
- Recommended: BUSMK 255 or equivalent; eligibility for ENGL 122 or equivalent

This course uses advertising and promotional tools for planning and coordinating an integrated promotional campaign. Students will work in a group as an agency with one client to apply course materials to a client business. Groups identify the target audience, set the communications goals, develop the promotional strategies, and evaluate the results. Emphasis is placed upon the efficient use of the client’s resources to accomplish communications goals through an effective promotional program. 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
An opportunity for students to pursue special interests under direction of the faculty. CSU

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.

Certificate of achievement – Real estate

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

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. CSU

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
Business real estate

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
• 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

Career – CARER

See also Counseling - COUNS

Counseling Division
Terry Armstrong, Dean
Counseling Center 211
925-685-1230 x 2288

Possible career opportunities
Diablo Valley College’s career development courses are designed to provide students with opportunities to explore career fields and become familiar with the skills needed to successfully obtain and maintain employment.

CARER-110 Career and Life Planning
3 units SC
• 54 hours lecture per term
• Recommended: eligibility for ENGL 122 or equivalent
• Note: testing fee required
• Formerly COUNS-110
In this course students will learn research strategies to make effective career and major choices, using a variety of techniques to find, retrieve, and evaluate career planning information. Utilizing career assessments, students will identify their preferred work values, interests, skills and personality traits. Research will then focus on the exploration of labor market needs, educational and employment requirements, and career ladders within given professions resulting in an effective educational and job search plan. This course will develop
psychological “soft skills” in the domain of human relations: interpersonal communication, self-esteem and professional confidence, emotional intelligence, conflict resolution, and effective collaboration in term-building skills. CSU

CARER-120 Career Assessment
1 unit P/NP
• 18 hours lecture per term
• Note: testing fee required. Not intended for students who have completed CARER 110.
This course is designed to promote self-awareness through the administration of career assessments, discussion and interpretation of interests, aptitude, personality and values assessments. Various career assessment inventories will be used as a starting point in the career exploration process. Recommended for people changing careers and/or re-entering the workforce. CSU

CARER-130 Career and Major Exploration
1 unit P/NP
• 18 hours lecture per term
• Recommended: CARER 120 or equivalent
• Formerly CARER 160
This course is designed for students who are undecided about their career and/or educational goals. It includes an introduction to the basic career planning process and computerized information systems that aid in the research of occupational and college major options. CSU

CARER-140 Job Search Strategies
1 unit P/NP
• 18 hours lecture per term
This course prepares students for the employment search process including identification of goals and job skills, how to complete an application, traditional and electronic cover letters and resumes, interviewing techniques, job market research and overview of employers and employer rights. Students will identify and discuss the employability skills most commonly sought by employers. CSU

CARER-150 Topics in Careers
.3-4 units SC
• May be repeated three times
• Variable hours
This course is designed to address topics in career and job search related subjects. Specific topics will be announced in the schedule of courses. CSU

CARER-170 Career Transitions
1 unit P/NP
• 18 hours lecture per term
This course provides a theoretical and practical basis for the student to define and plan individual career/life goals. Lecture and discussions will analyze the processes involved in making informed career decisions as well as effective strategies for determining career goals. Students will also identify and discuss the employability skills most commonly sought by employers. CSU

Chemistry – CHEM

Physical Sciences Division
Dennis Smith, Dean
Physical Sciences Building 261
925-685-1230 x 2359

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, non-profit 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 Chemistry for Non-Science Majors
4 units SC
• 72 hours lecture/36 hours laboratory per term
• Prerequisite: MATH 110 or one year of high school algebra or equivalent.
• Recommended: eligibility for ENGL 122 or equivalent
• Note: this is not a preparatory course for other chemistry courses.
This course is designed to develop scientific literacy for non-science majors and to meet the General Education requirement for physical science with lab. The course places chemistry concepts in a practical context using qualitative and quantitative examples that are encountered in everyday life. 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 compounds) 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  P/NP
• 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 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 I
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 II
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
Chinese – CHIN

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.

Possible career opportunities
The study of Chinese 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 accomplishment - 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 accomplishment, 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:**

<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=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=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

**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+221=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=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
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

CIS-053 Topics in Graphics and Presentation Applications
.3-2 units SC
• May be repeated three times
• Non 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
.3-2 units SC
• May be repeated three times
• Non 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
.3-2 units SC
• May be repeated three times
• Non 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-056 Special Topics in Software Applications
.75-2 units SC
• May be repeated three times
• Non 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.

CIS-100 Microsoft Windows - Comprehensive
2 units SC
• May be repeated once
• 36 hours lecture/18 hours laboratory per term
This course teaches the functions of Microsoft Windows Operating System (OS). It prepares students to use the various local and network functions of the current Windows OS. No previous computer experience is required. CSU

CIS-101 Apple Mac Operating System
2 units SC
• May be repeated once
• 36 hours lecture/18 hours laboratory per term
This course teaches the functions of the Apple Mac Operating System, including the graphical user interface, file and folder management, system preferences, and networking. No previous computer experience is required. CSU
### Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>SC</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CIS-105</strong></td>
<td>Introduction to Web Design</td>
<td>2</td>
<td>SC</td>
<td>2 units. SC • May be repeated once • 36 hours lecture/18 hours laboratory per term • Recommended: CIS 100 or CIS 101 or equivalent</td>
</tr>
<tr>
<td><strong>CIS-106</strong></td>
<td>Adobe Dreamweaver - Comprehensive</td>
<td>2</td>
<td>SC</td>
<td>2 units. SC • May be repeated once • 36 hours lecture/18 hours laboratory per term • Recommended: CIS 100 or CIS 101 or equivalent</td>
</tr>
<tr>
<td><strong>CIS-107</strong></td>
<td>Web Database with Dreamweaver</td>
<td>2</td>
<td>SC</td>
<td>2 units. SC • May be repeated once • 36 hours lecture/18 hours laboratory per term • Recommended: CIS 100 or CIS 101 or equivalent</td>
</tr>
<tr>
<td><strong>CIS-108</strong></td>
<td>Microsoft Word - Comprehensive</td>
<td>2</td>
<td>SC</td>
<td>2 units. SC • May be repeated once • 36 hours lecture/18 hours laboratory per term • Recommended: CIS 100 or CIS 101 or equivalent</td>
</tr>
<tr>
<td><strong>CIS-115</strong></td>
<td>Adobe Photoshop Elements</td>
<td>2</td>
<td>SC</td>
<td>2 units. SC • May be repeated once • 36 hours lecture/18 hours laboratory per term • Recommended: CIS 100 or CIS 101 or equivalent</td>
</tr>
<tr>
<td><strong>CIS-109</strong></td>
<td>Microsoft Excel - Comprehensive</td>
<td>2</td>
<td>SC</td>
<td>2 units. SC • May be repeated once • 36 hours lecture/18 hours laboratory per term • Recommended: CIS 100 or CIS 101 or equivalent</td>
</tr>
<tr>
<td><strong>CIS-116</strong></td>
<td>Microsoft Excel - Comprehensive</td>
<td>2</td>
<td>SC</td>
<td>2 units. SC • May be repeated once • 36 hours lecture/18 hours laboratory per term • Recommended: CIS 100 or CIS 101 or equivalent</td>
</tr>
<tr>
<td><strong>CIS-117</strong></td>
<td>Microsoft Access - Comprehensive</td>
<td>2</td>
<td>SC</td>
<td>2 units. SC • May be repeated once • 36 hours lecture/18 hours laboratory per term • Recommended: CIS 100 or CIS 101 or equivalent</td>
</tr>
<tr>
<td><strong>CIS-118</strong></td>
<td>Microsoft PowerPoint - Comprehensive</td>
<td>2</td>
<td>SC</td>
<td>2 units. SC • May be repeated once • 36 hours lecture/18 hours laboratory per term • Recommended: CIS 100 or CIS 101 or equivalent</td>
</tr>
<tr>
<td><strong>CIS-119</strong></td>
<td>Microsoft Outlook - Comprehensive</td>
<td>2</td>
<td>SC</td>
<td>2 units. SC • May be repeated once • 36 hours lecture/18 hours laboratory per term • Recommended: CIS 100 or CIS 101 or equivalent</td>
</tr>
<tr>
<td><strong>CIS-120</strong></td>
<td>Adobe Flash - Comprehensive</td>
<td>2</td>
<td>SC</td>
<td>2 units. SC • May be repeated once • 36 hours lecture/18 hours laboratory per term • Recommended: CIS 100 or CIS 101 or equivalent</td>
</tr>
</tbody>
</table>
CIS-132  Adobe Premiere Elements - Comprehensive
2 units  SC
- May be repeated once
- 36 hours lecture/18 hours laboratory per term
- Recommended: CIS 100 or CIS 101 or equivalent
This course will allow students to gain proficiency in Adobe Premiere Elements, covering video acquisition, editing, titling, web and DVD authoring. CSU

CIS-133  Using Camtasia
1 unit  SC
- May be repeated once
- 18 hours lecture/18 hours laboratory per term
- Recommended: CIS 100 or CIS 101 or equivalent
A course on using Camtasia Studio to create training presentations and demonstrations. Students will learn screen capturing, editing, and production of final video for online and other digital media. CSU

CIS-134  Using Apple iLife
2 units  SC
- May be repeated once
- 36 hours lecture/18 hours laboratory per term
- Recommended: CIS 100 or CIS 101 or equivalent
An introduction to Apple's iLife to create, organize, view and publish digital content, such as pictures, movies, music, and web pages. The course will cover iPhoto, iMovie, iWeb, GarageBand, and iDVD. CSU

CIS-135  Podcasting
1 unit  SC
- May be repeated once
- 18 hours lecture/18 hours laboratory per term
- Recommended: CIS 100 or CIS 101 or equivalent
A course on creating and syndicating digital media over the internet. It covers the tools to create digital media and the techniques to promote them on the internet. CSU

CIS-150  Topics in Computer Information Systems
.75-.4 units  SC
- Variable hours
A supplemental course in Computer Information Systems to provide a study of current concepts and problems. Specific topics will be announced in the schedule of courses. CSU

CIS-160  Introduction to MySql
2 units  SC
- May be repeated once
- 36 hours lecture/18 hours laboratory per term
- Recommended: CIS 100 or CIS 101 or equivalent
This course introduces students to the MySql database program, which is used to create, organize, and maintain dynamic web sites. Emphasis is placed on table creation, queries, and database management. CSU

CIS-180  Introduction to Project Management/ CAPM Prep
3 units  SC
- 54 hours lecture per term
This course is an introductory course on formal professional project management. It will also prepare the student to take the internationally recognized Project Management Institute (PMI) Certified Associate in Project Management (CAPM) certification exam. Earning a CAPM certification demonstrates that an individual possesses the skills required to manage projects and deliver products. Students will gain a solid knowledge of the processes of project management. The CAPM certification is recognized by nearly every industry in over 120 countries around the world. This course requires no previous experience with project management. CSU

CIS-181  Project Management Fundamentals/ PMI PMP Prep
3 units  SC
- 54 hours lecture per term
- Recommended: CIS 180 or equivalent
This course is an intermediate course on formal professional project management. This course prepares the student to take the internationally recognized Project Management Institute (PMI) Project Management Professional (PMP) certification exam. Earning a PMP certification demonstrates that the student has acquired the skills to manage projects, deliver products and has a solid knowledge of PMP fundamentals. CSU

CIS-185  Microsoft Project
2 units  SC
- May be repeated once
- 36 hours lecture/18 hours laboratory per term
- Recommended: CIS 100 or CIS 101 or equivalent
This course introduces the basic features and tools of Microsoft Project, including the following: creating a task list, setting up and assigning resources, tracking progress on tasks, organizing and formatting project details, publishing project information, sharing project information with other programs, tracking project progress, and consolidating projects and resources. CSU

CIS-186  Microsoft Visio
2 units  SC
- May be repeated once
- 36 hours lecture/18 hours laboratory per term
- Recommended: CIS 100 or CIS 101 or equivalent
Students will learn to use Microsoft Visio to create diagrams and flowcharts, including designing, creating, saving, and printing new Visio documents. CSU
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.

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 for the major. Certain courses may satisfy both a major and a DVC General Education requirement; however the units are only counted once.

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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 networking with Microsoft products. Students who intend to transfer to a four-year program should consult with a counselor regarding other course requirements. 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.

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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.

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Computer network technology

plus at least 6 units from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Type</th>
<th>Repeatable</th>
<th>Hours Lecture/Laboratory per Term</th>
</tr>
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<tbody>
<tr>
<td>CNT 131</td>
<td>Administering a Microsoft SQL Database</td>
<td>3</td>
<td>LR</td>
<td></td>
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</tr>
<tr>
<td>CNT 134</td>
<td>Microsoft Internet Security and Acceleration (ISA) Server</td>
<td>3</td>
<td>SC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNT 138</td>
<td>Implementing and Managing Microsoft Exchange Server</td>
<td>3</td>
<td>SC</td>
<td></td>
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</tr>
</tbody>
</table>

**Total required units**: 32

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**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 networking 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

Students will learn to install and configure Microsoft Windows Professional on stand-alone computers and on client comput-
Computer science

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, 95)
b. Computer science transfer students planning to major in Computer Science or computer engineering at a four-year school (COMSC 105, 110, 210, 260, 255, and 265)
c. Information systems (programming) professionals who are seeking to update their skills, (COMSC 98, 144, 171, 172, 245, 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 skillset 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.

general education requirements .............................................. 26-38

major requirements
COMSC 110 Introduction to Programming .................................. 4
COMSC 210 Program Design and Data Structure ......................... 4
COMSC 260 Assembly Language Programming/Computer Organization . 4

in addition, the student must complete either
COMSC 265 Advanced Programming with C/C++ .......................... 4
COMSC 266 Object Oriented Programming with C++ ...................... 4

or
COMSC 255 Programming with Java ........................................ 4
COMSC 256 Advanced Programming with Java .......................... 4

Total units for the major .................................................. 20
electives

units from a selection of degree applicable courses 2-13
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 P

required courses

units
BUSAC 186 Principles of Accounting I .................................... 4
COMSC 110 Introduction to Programming .................................. 4

plus at least 4 units from:
COMSC 100 Introduction to Computers and Information Systems ............ 3
COMSC 100L Introduction to Computer Software ................................ 1
COMSC 105 Introduction to Computer Science .................................. 4

plus at least 3 units from:
BUS 240 Business Statistics .................................................. 3
MATH 142 Elementary Statistics and Probability ............................. 4

plus at least 12 units from:
BUS 250 Business Communications I ......................................... 3
CNT 105 Computer Networking Hardware/Software ......................... 3
CNT 114 Introduction to UNIX .................................................. 2
COMSC 95 Microsoft Windows Operating System Essentials/ Administration .............................................................................. 3
COMSC 96 Advanced WWW Publishing ........................................ 1
COMSC 97 Advanced HTML - Style Sheets and DHTML ...................... 1
COMSC 171 Computer and Information Systems .............................. 2
COMSC 245 Programming with Visual Basic.NET ............................ 4
COMSC 255 Programming with Java ............................................. 4
COMSC 256 Advanced Java Programming ...................................... 4
COMSC 265 Advanced Programming with C/C++ ............................. 4
COMSC 266 Object Oriented Programming with C++ .......................... 4
COMSC 267 Windows Programming with C# .................................. 4

Total units required .................................................................. 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 P

required courses

units
BUSAC 186 Principles of Accounting I ........................................ 4
BUS 250 Business Communications I .......................................... 3
COMSC 100 Introduction to Computers and Information Systems ........ 3
COMSC 100L Introduction to Computer Software .............................. 1
COMSC 110 Introduction to Programming ...................................... 4
plus at least 12 units from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tr>
<td>BUSAC 185</td>
<td>Computer Accounting for Business I</td>
<td>1.5</td>
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<tr>
<td>CNT 105</td>
<td>Computer Networking Hardware/Software</td>
<td>3</td>
</tr>
<tr>
<td>CNT 114</td>
<td>Microsoft Windows Operating System Essentials/Administration</td>
<td>3</td>
</tr>
<tr>
<td>COMSC 95</td>
<td>WWW Publishing with HTML</td>
<td>1</td>
</tr>
<tr>
<td>COMSC 96</td>
<td>Advanced WWW Publishing</td>
<td>1</td>
</tr>
<tr>
<td>COMSC 97</td>
<td>Advanced HTML - Style Sheets and DHTML</td>
<td>1</td>
</tr>
<tr>
<td>COMSC 150**</td>
<td>Topics in Computer Science</td>
<td>0.3-4</td>
</tr>
<tr>
<td>COMSC 151**</td>
<td>Topics in Operating Systems</td>
<td>0.3-4</td>
</tr>
<tr>
<td>COMSC 152**</td>
<td>Topics in Application Software</td>
<td>0.3-4</td>
</tr>
<tr>
<td>COMSC 154**</td>
<td>Topics in Programming Languages</td>
<td>0.3-4</td>
</tr>
<tr>
<td>COMSC 155**</td>
<td>Topics in Networking</td>
<td>0.3-4</td>
</tr>
<tr>
<td>COMSC 171</td>
<td>Introduction to UNIX</td>
<td>2</td>
</tr>
<tr>
<td>COMSC 245</td>
<td>Programming with Visual Basic</td>
<td>4</td>
</tr>
<tr>
<td>COMSC 255</td>
<td>Programming with Java</td>
<td>4</td>
</tr>
<tr>
<td>COMSC 265</td>
<td>Advanced Programming with C/C++</td>
<td>4</td>
</tr>
</tbody>
</table>

** Up to 4 units total may be from COMSC 150, COMSC 151, COMSC 152, COMSC 154, and COMSC 155.

** Total units required 27

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**COMSC-095** WWW Publishing with HTML
1 unit P/NP
- May be repeated once
- Non 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 webpage and study how to create attractive and functional documents using text and graphics.

**COMSC-096** Advanced WWW Publishing
1 unit P/NP
- May be repeated once
- Non 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 web programming fundamentals.

**COMSC-097** Advanced HTML - Style Sheets and DHTML
1 unit P/NP
- May be repeated once
- Non degree applicable
- 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 webpage. 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-098** PERL/CGI
1 unit P/NP
- May be repeated once
- Non degree applicable
- 18 hours lecture/9 hours laboratory per term
- Recommended: COMSC 095 or equivalent

This course will help you become fluent in PERL, fully versed in the language syntax, semantics and elements of style. We will create Web Pages and link them to CGI scripts written in PERL. These scripts will be used to generate dynamic web pages, and access files and data bases on web servers. We will also install Apache server software and Active State PERL interpreter.

**COMSC-100** Introduction to Computers and Information Systems
3 units SC
- 54 hours lecture/18 hours laboratory per term

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 BUS 6 CAN CSCI 2, CSU, UC (credit limits may apply to UC - see counselor)

**COMSC-100L** Introduction to Computer Software
1 unit SC
- Concurrent enrollment in COMSC 100

The student will learn to use the Microsoft Windows operating system and Microsoft Office, including the Excel spreadsheet program, the Access database program, the PowerPoint presentation program and the Word word processing program. 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
4 units SC
- 54 hours lecture/54 hours laboratory per term
- Note: this is the preferred introductory course for computer science majors.

A beginning course for computer science majors and students interested in programming. 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-121 Introduction to Oracle Database Administration
4 units SC
- 54 hours lecture/54 hours laboratory per term
- Recommended: COMSC 105 or equivalent

This course is designed to give the Oracle database administrator (DBA) a firm foundation in basic administrative tasks and provide the necessary knowledge and skills to set up, maintain, and troubleshoot an Oracle database. 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

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

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

COMSC-152 Topics in Application Software
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
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
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, CU, 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: may be 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, serv-lets 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 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-260 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-265 Advanced Programming With C and C++
4 units SC
• 54 hours lecture/54 hours laboratory per term
• Prerequisite: 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 16+22, CSU, UC

COMSC-266 Object Oriented Programming C++
4 units SC
• 54 hours lecture/54 hours laboratory per term
• Recommended: COMSC 265 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

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
This two-year associate in science 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.

general education requirements........................................... 26-38

major requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 250</td>
<td>Business Communications I</td>
<td>3</td>
</tr>
<tr>
<td>CNT 103</td>
<td>Voice, Video and Network Cabling</td>
<td>1</td>
</tr>
<tr>
<td>CNT 105</td>
<td>Computer Networking Hardware/Software</td>
<td>3</td>
</tr>
<tr>
<td>CNT 114</td>
<td>Microsoft Windows Operating System</td>
<td>3</td>
</tr>
<tr>
<td>CNT 105</td>
<td>Introduction to Computer Science</td>
<td>4</td>
</tr>
<tr>
<td>COMSC 100L</td>
<td>Introduction to Computer Software</td>
<td>1</td>
</tr>
<tr>
<td>COMSC 105</td>
<td>Introduction to Computer Hardware/Software</td>
<td>4</td>
</tr>
<tr>
<td>COMTC 110B</td>
<td>Introduction to Operating Systems</td>
<td>4</td>
</tr>
<tr>
<td>COMTC 120</td>
<td>Computer Systems Troubleshooting</td>
<td>4</td>
</tr>
</tbody>
</table>

Total units for the major 27
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.

required courses | units
--- | ---
BUS 250 Business Communications I | 3
CNT 103 Voice, Video and Network Cabling | 1
CNT 105 Computer Networking Hardware/Software | 3
CNT 114 Microsoft Windows Operating System Essentials/Administration | 3
COMSC 100L Introduction to Computer Software | 1
COMSC 105 Introduction to Computer Science | 4
COMTC 110B Introduction to Computer Hardware/Software | 4
COMTC 118 Introduction to Operating Systems | 4
COMTC 120 Computer Systems Troubleshooting | 4

Total units required | 27

Certificate of accomplishment - 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 accomplishment, 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.

required courses | units
--- | ---
COMTC 110B Introduction to Computer Hardware/Software | 4
COMTC 118 Introduction to Operating Systems | 4
COMTC 115 A+ Exam Preparation | 2

Total units required | 14

COMTC-110B Introduction to Computer Hardware/Software
4 units LR
- May be repeated once
- 54 hours lecture/54 hours laboratory per term
This is an introductory level course for students who have no computer hardware experience. Students will build and configure several computer systems, learn how to do basic hardware and operating system troubleshooting and repair. This course will have more emphasis on software, troubleshooting and repair than COMTC-110A. CSU

COMTC-115 A+ Exam Preparation
2 units LR
- 36 hours lecture/18 hours laboratory per term
- Recommended: COMTC 110B or equivalent
This course will cover the topics that are on the A+ computer technician exam. Students will learn the scope of the exam by taking practice exams and then study on the areas that they need to improve. CSU

COMTC-118 Introduction to Operating Systems
4 units LR
- May be repeated once
- 54 hours lecture/54 hours laboratory per term
This course combines theory with hands-on experience in an introduction to Central Processing Units (CPU), hard disk controllers, magnetic data storage, various file systems, and file maintenance tasks. This course will introduce students to the procedures involved in supporting various versions of Windows, DOS and LINUX operating systems. CSU

COMTC-120 Computer Systems Troubleshooting
4 units LR
- May be repeated once
- 54 hours lecture/54 hours laboratory per term
- Prerequisite: COMTC 110B or equivalent, COMTC 118 or equivalent
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 units
CONST 114 Blueprint Reading ........................................... 2
CONST 124 Construction Details and Specifications ............. 3
CONST 170 Fundamentals of Building Inspection ................. 3
CONST 181 Building Code Interpretation: Non-Structural .... 3
CONST 182 Building Code Interpretation: Structural .......... 3
CONST 183 Title 24: Energy Conservation/Handicap Codes .... 3
CONST 181 Plumbing Code Interpretation ......................... 3
CONST 192 Mechanical Code Interpretation ..................... 3
CONST 266 Electrical Codes: Articles 90-398 ....................... 3
CONST 267 Electrical Codes: Articles 400-830 ..................... 3
CONST 273 Construction Management ......................... 3

Total units required 32

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 units
ARCHI 222 Architectural Working Drawings I .................. 3
COMSC 100 Introduction to Computers and Information Systems ................................................................. 3
COMSC 100L Introduction to Computer Software ............... 1
CONST 135 Construction Processes (Residential) ................. 4
CONST 136 Construction Processes ................................ 4
CONST 144 Materials of Construction ............................. 3
CONST 244 Estimating - Residential ............................... 3
CONST 273 Construction Management .......................... 3
CONST 276 Legal Aspects - Construction Industry ............. 3
ENGL 130 Introduction to Technical Writing .................... 3
ENGIN 111 Mathematics for Technicians ......................... 4
PHYS 110 Elementary Physics ..................................... 3

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 units
BUSB 120 Introduction to Management Studies .................. 3
BUSB 121 Practices and Concepts of Supervision ............... 3
CONST 114 Blueprint Reading ......................................... 2
CONST 116 Surveying Related to Construction ................. 3
CONST 124 Construction Details and Specifications .......... 3
CONST 244 Estimating - Residential ............................... 3
CONST 245 Estimating - Commercial ............................ 3
CONST 273 Construction Management Studies ................. 3
CONST 276 Legal Aspects - Construction Industry ............. 3
ENGL 130 Introduction to Technical Writing .................... 3

Total units required 28

CONST-110 Occupational Safety
2 units SC
• May be repeated once
• 36 hours lecture per term
• Note: May be repeated when regulatory or industry standards change
• Formerly INTEC 110

This course covers the principles of safety in an industrial environment. Topics include: safety legislation and programs, management/supervisory and employee responsibilities and attitudes, physical hazards associated with chemicals, equipment, fire, compressed gases and other topics including eye, stress, drugs, lifting, office and noise safety. OSHA and EPA regulations as applied to the industrial environment. CSU

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 (Residential)  
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.  
Introduction to the basic concepts of the construction industry. A study of the processes of light wood-frame construction, covering code requirements in construction. Areas of focus include quantity analysis, work activity sequencing and scheduling. This course lays the foundation for further study of other construction courses. 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  
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  
- May be repeated once  
- 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-182 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 - Residential
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 - Commercial
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-266 Electrical Codes: Articles 90-398
3 units SC
- May be repeated once
- 54 hours lecture per term
- Note: same as ELECT 266. May be repeated when code changes.
Interpretation of the National Electrical Code for general requirements, wiring and protection, wiring methods and materials (articles 90-398). Safety installation practices will be applied.

CONST-267 Electrical Codes: Articles 400-830
3 units SC
- May be repeated once
- 54 hours lecture per term
- Note: same as ELECT 267. May be repeated when code changes.
Interpretation of the National Electrical Code for equipment for general use, special occupancies and special equipment (articles 400-830). Safety installation practices will be applied.

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 intern 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 SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through Career and Employment Services. Students must be enrolled in a minimum of 7 units including this class for Fall or Spring term. (For summer term only, students must be enrolled in a minimum of .5 units in addition to this class.) Students may earn 1 unit for each 75 hours of 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 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  SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through Career and Employment Services. Students must be enrolled in a minimum of 7 units including this class for Fall or Spring term. (For summer term only, students must be enrolled in a minimum of .5 units in addition to this class.) Students may earn 1 unit for each 75 hours of work per term. Does not meet requirements for veterans' benefits.

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 choices. 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 focuses on student-defined learning objectives. CSU

COOP-170A Internship in Occupational Work Experience Education
1-4 units  SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through Career and Employment Services. Students must be enrolled in a minimum of 7 units including this class for Fall or Spring term. (For summer term only, students must be enrolled in a minimum of .5 units in addition to this class.) Students may earn 1 unit for each 75 hours of work per term. Does not meet requirements for veterans' benefits.

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 laboratory. The course 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. 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. CSU

Counselling – COUNS

Counseling Division
Terry Armstrong, Dean
Counseling Center 111
925-685-1230 x 2288

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-075 Topics in College Readiness
.3-4 units  P/NP
- May be repeated three times
- Non 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  P/NP
- May be repeated once
- Non 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  P/NP
- Variable hours
- Note: completion of English and math assessment seven days prior to this course will facilitate appropriate course selection

An introduction to college which is designed to provide students with a concrete plan for succeeding in college. Topics include: identification of educational and career goals, strategic use of student services, academic assessment (effective course selection and scheduling), geographical orientation, counseling and advising.

COUNS-106 Orientation to College for Student-Athletes
.3-2 units  P/NP
- Variable hours
- Note: completion of English and math assessment seven days prior to this course will facilitate appropriate course selection

An introduction to college for student-athletes, designed to provide students with a concrete plan for enrolling 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 P/NP
• 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.

COUNS-115 Resiliency and Student Success
1 unit P/NP
• 18 hours lecture per term
• Recommended: eligibility for ENGL 116/118 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

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 topics will be announced in the schedule of courses. CSU

Culinary arts – CULN

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.
Culinary arts

<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>
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<tr>
<td>CULN 115 Culinary Mathematics</td>
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<tr>
<td>CULN 120 Fundamentals of Cuisine</td>
<td>5</td>
</tr>
<tr>
<td>CULN 137 Garde Manger</td>
<td>2</td>
</tr>
<tr>
<td>CULN 153 Safety and Sanitation</td>
<td>2</td>
</tr>
<tr>
<td>CULN 160 Fundamentals of Wine and Spirits</td>
<td>3</td>
</tr>
<tr>
<td>CULN 165 Dining Room Operations</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>CULN 190 Purchasing Systems and Operations</td>
<td>2</td>
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<tr>
<td>CULN 191 Purchasing Systems and Operations Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>CULN 194 Supervisory Management in Food Systems</td>
<td>3</td>
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<tr>
<td>CULN 220 Advanced Pastry and Baking</td>
<td>5</td>
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<tr>
<td>CULN 224 Catering Business and Operations</td>
<td>2</td>
</tr>
<tr>
<td>CULN 225 Laboratory Topics in Catering and Special Events</td>
<td>3.5</td>
</tr>
<tr>
<td>CULN 225 Laboratory Topics in Catering and Special Events</td>
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</tbody>
</table>

plus at least 2 units from:

CULN 224 Catering Business and Operations............ 2

plus at least 2 units from:

COOP 170 Occupational Work Experience.................. 1-4
COOP 170A Internship in Occupational Work Experience . 1-4

Total units required 45

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.

CULN 105 Introduction to the Kitchen .................. 0.5
CULN 110 Orientation to Hospitality .................. 3
CULN 115 Culinary Mathematics ......................... 1.5
CULN 120 Fundamentals of Cuisine ....................... 5
CULN 137 Garde Manger .................................. 2
CULN 153 Safety and Sanitation ......................... 2
CULN 160 Fundamentals of Wine and Spirits ............. 3
CULN 165 Dining Room Operations ....................... 2
CULN 180 Fundamentals of Baking ....................... 3.5
CULN 185 Nutritional Guidelines in Food Preparation 2
CULN 190 Purchasing Systems and Operations .......... 2
CULN 191 Purchasing Systems and Operations Laboratory | 2
CULN 194 Supervisory Management in Food Systems........ 3
CULN 220 Advanced Cuisine ................................ 5
CULN 224 Catering Business and Operations .......... 2

plus at least 2.5 units from:

CULN 225 Laboratory Topics in Catering and Special Events | 0.3-4

CULN 105 Introduction to the Kitchen .................. 0.5
CULN 110 Orientation to Hospitality .................. 3
CULN 115 Culinary Mathematics ......................... 1.5
CULN 120 Fundamentals of Cuisine ....................... 5
CULN 137 Garde Manger .................................. 2
CULN 153 Safety and Sanitation ......................... 2
CULN 160 Fundamentals of Wine and Spirits ............. 3
CULN 165 Dining Room Operations ....................... 2
CULN 180 Fundamentals of Baking ....................... 3.5
CULN 185 Nutritional Guidelines in Food Preparation 2
CULN 190 Purchasing Systems and Operations .......... 2
CULN 191 Purchasing Systems and Operations Laboratory | 2
CULN 194 Supervisory Management in Food Systems........ 3
CULN 220 Advanced Cuisine ................................ 5
CULN 224 Catering Business and Operations .......... 2

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.

CULN 105 Introduction to the Kitchen .................. 0.5
CULN 110 Orientation to Hospitality .................. 3
CULN 115 Culinary Mathematics ......................... 1.5
CULN 120 Fundamentals of Cuisine ....................... 5
CULN 137 Garde Manger .................................. 2
CULN 153 Safety and Sanitation ......................... 2
CULN 160 Fundamentals of Wine and Spirits ............. 3
CULN 165 Dining Room Operations ....................... 2
CULN 180 Fundamentals of Baking ....................... 3.5
CULN 185 Nutritional Guidelines in Food Preparation 2
CULN 190 Purchasing Systems and Operations .......... 2
CULN 194 Supervisory Management in Food Systems........ 3
CULN 220 Advanced Cuisine ................................ 5
CULN 224 Catering Business and Operations .......... 2

plus at least 2.5 units from:

CULN 225 Laboratory Topics in Catering and Special Events | 0.3-4

CULN 105 Introduction to the Kitchen .................. 0.5
CULN 110 Orientation to Hospitality .................. 3
CULN 115 Culinary Mathematics ......................... 1.5
CULN 120 Fundamentals of Cuisine ....................... 5
CULN 137 Garde Manger .................................. 2
CULN 153 Safety and Sanitation ......................... 2
CULN 160 Fundamentals of Wine and Spirits ............. 3
CULN 165 Dining Room Operations ....................... 2
CULN 180 Fundamentals of Baking ....................... 3.5
CULN 185 Nutritional Guidelines in Food Preparation 2
CULN 190 Purchasing Systems and Operations .......... 2
CULN 194 Supervisory Management in Food Systems........ 3
CULN 220 Advanced Cuisine ................................ 5
CULN 224 Catering Business and Operations .......... 2

plus at least 2 units from:

COOP 170 Occupational Work Experience .................. 1-4
COOP 170A Internship in Occupational Work Experience . 1-4

Total units required 47.5

Note: DVC’s restaurant management certificate is geared primarily toward DVC’s culinary students desiring some additional management coursework. Students who are interested in pursuing a management-focused program in hospitality should expect to complete a four-year degree program at a university.
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
.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

CULN-110  Orientation to Hospitality
3 units  SC
• 54 hours lecture per term
• Formerly HRMGT 100
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

CULN-115  Culinary Math
1.5 units  SC
• 27 hours lecture per term
This course focuses on the application of math competencies to specific business situations in the food service industry. CSU

CULN-120  Fundamentals of Cuisine
5 units  SC
• 270 hours laboratory per term
• Prerequisite: CULN 105 or equivalent
• Co-requisite: CULN 153 or equivalent
• Recommended: eligibility for ENGL 122 or equivalent
• Formerly HRMCU 120
This course builds on basic student skills in knife, tool and culinary equipment handling, introduces basic food preparation, and provides a working knowledge of laws and regulations relating to safety and sanitation in the kitchen. The emphasis is on quantity for service. CSU

CULN-127  Garde Manger
2 units  SC
• 18 hours lecture/54 hours laboratory per term
• Prerequisite: CULN 120 or equivalent
• Formerly HRMCU 127
A study of the artistic side of cold food preparation from basic garnishes to advanced forcemeat preparations such as galantines, pates and mousses. Emphasis on decorated platters, buffets, and food show competitions. CSU

CULN-150  Topics in Culinary Arts
.3-.4 units  SC
• May be repeated three times
• Variable hours
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

CULN-153  Safety and Sanitation
2 units  SC
• 36 hours lecture per term
• Recommended: eligibility for ENGL 122 or equivalent
• Formerly HRMGT 153
A course to develop a working knowledge of the basic principles of safety and sanitation and their application in food service operations. Effective hygiene habits and food handling practices are reinforced, for protection of consumers. This course must be taken before or concurrently with the first culinary laboratory course. CSU

CULN-155  Topics in Culinary Management
.3-.4 units  SC
• May be repeated three times
• Variable hours
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

CULN-160  Fundamentals of Wine and Spirits
3 units  SC
• 54 hours lecture per term
• Recommended: eligibility for ENGL 122 or equivalent
• Formerly HRMGT 260
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

CULN-165  Dining Room Operations
2 units  SC
• 36 hours lecture per term
• Co-requisite: CULN 166 or equivalent
Principles and techniques of dining room service and management, including various table settings and methods of service. CSU
CULN-166  Dining Room Operations Laboratory
2 units  SC
• May be repeated three times
• 108 hours laboratory per term
• Co-requisite: CULN 153 or equivalent and CULN 165 or equivalent
• Formerly HRMGT 150 (laboratory component)
This course provides practical experience in the fundamentals of dining room service, including rules and methods of service, handling various forms of food service, and conducting basic dining room management and planning. CSU

CULN-180  Fundamentals of Baking
3.5 units  SC
• 18 hours lecture/135 hours laboratory per term
• Co-requisite: CULN 153 or equivalent
• Recommended: ENGL 122 or equivalent
• Formerly HRMCU 180A and 180B
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

CULN-185  Nutritional Guidelines in Food Preparation
2 units  SC
• 36 hours lecture per term
• Recommended: eligibility for ENGL 122 or equivalent
• 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
• 96 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-211  Patisserie Essentials
1 unit  SC
• May be repeated once
• 9 hours lecture/27 hours laboratory per term
• Formerly HRMCU 211
The study and preparation of refined pastries and desserts; petit fours, tarts, bavarians, charlottes, mousses, soufflés, ice creams, sorbets, custards, puddings, and cakes. CSU

CULN-214  Cake and Pastry Decorating Essentials
1 unit  SC
• May be repeated once
• 9 hours lecture/27 hours laboratory per term
• Formerly HRMCU 214
A course of practical instruction and skill development in decorating birthday, wedding, and special occasion cakes and pastries. CSU

CULN-215  Decorative Confectionary Showpieces
1 unit  SC
• 18 hours lecture per term
• Recommended: CULN 180 or equivalent
• Formerly HRMCU 215
A course in the methodology of sugar work and advanced confectionary arts. CSU

CULN-216  Food and Wine Pairing
1.5 units  SC
• 27 hours lecture per term
This course prepares students planning careers in restaurant management to present wines that complement menu offerings. 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
  • 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
  • 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. CSU

CULN-225  Laboratory Topics in Catering and Special Events
3-4 units   P/NP
  • May be repeated three times
  • Variable hours
  • Co-requisite: CULN 153 or equivalent
  • Recommended: CULN 120 or equivalent; eligibility for ENGL 122 or equivalent
  • 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

CULN-226  California Cuisine
2 units   SC
  • May be repeated once
  • 27 hours lecture/27 hours laboratory per term
  • Prerequisite: CULN 120 or equivalent
  • Recommended: eligibility for ENGL 122 or equivalent
  • Note: students who have substantial experience in the kitchen or who have completed most of their work in the culinary program will be comfortable with the instructional level.
  • Formerly HRMCU 226
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

CULN-228  International Cuisine
2 units   SC
  • May be repeated once
  • 27 hours lecture/27 hours laboratory per term
  • Recommended: eligibility for ENGL 122 or equivalent
  • Formerly HRMCU 228
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

CULN-280  Advanced Pastry and Baking
5 units   SC
  • May be repeated once
  • 27 hours lecture/189 hours laboratory per term
  • Prerequisite, CULN 180 or equivalent
Advanced theory and technique in pastry and baking, including fruit desserts, spoon desserts, tarts, pies, plated desserts, frozen desserts, modernist desserts, decorated cakes, and light and low calorie desserts. CSU

CULN-298  Independent Study
5-8 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
  • Formerly HRMCU 298
An opportunity for selected students to pursue special interests under direction of the faculty. CSU

Dance – DANCE

Physical Education, Athletics and Dance Division
Diane Smith, Interim Dean
Science Center Building 102
925-685-1230 x 2442

DANCE-133  Ballet I
1 unit   SC
  • 54 hours laboratory per term
  • Recommended: PEDAN 130 or equivalent
A ballet course for the intermediate student. This class will focus on intermediate ballet barre, center adagio, allegro work, and across-the-floor combinations. It will also include the history of classical ballet works and their influence on the ballet dancer and current ballet styles. CSU, UC
DANCE-134 Ballet II
1 unit SC
- May be repeated three times
- 54 hours laboratory per term
- Prerequisite: PEDAN 133 or equivalent
A ballet course for the advanced student. This class will focus on advanced ballet barre, center adagio, allegro work, and across-the-floor combinations. Students will also learn basic choreographic principles as they relate to ballet. CSU

DANCE-135 Pointe Technique
1 unit SC
- May be repeated three times
- 54 hours laboratory per term
- Prerequisite: PEDAN 133 or equivalent or PEDAN 130 or equivalent
- Formerly PEDAN 134
This is a course in classical ballet training through the application of Pointe technique. The class will focus on line, musicality, sequences, strength and grace as it relates to Pointe technique. The historical origins of the pointe shoe, pointe work, conceptual principles of Pointe ballet as an art form, and the anatomical structure of the lower extremities are also presented. CSU

DANCE-137 Jazz Dance I
1 unit SC
- 54 hours laboratory per term
- Recommended: PEDAN 136 or equivalent
A jazz dance course for the intermediate student. This class will focus on intermediate jazz dance from Broadway, Lyrical, Hip-Hop and Contemporary styles. It will also include the history of jazz dance on stage, movie, and videos and its influence on the dancer. CSU

DANCE-138 Jazz Dance II
1 unit SC
- May be repeated two times
- 54 hours laboratory per term
- Prerequisite: PEDAN 137 or equivalent
A jazz dance course for the advanced student. This class will focus on advanced jazz dance from Broadway, Lyrical, Hip-Hop and Contemporary styles. Students will also learn basic choreographic principles as they relate to jazz dance. CSU

DANCE-144 Modern Dance I
1 unit SC
- 54 hours laboratory per term
- Recommended: PEDAN 142 or equivalent
A modern dance course for the intermediate student. This class will focus on intermediate axial and locomotor movements, styles from early modern, post-modern, and contemporary modern innovators. It will also include the history of modern dance and its influence on the modern dancer and current modern dance styles. CSU

DANCE-145 Modern Dance II
1 unit SC
- 54 hours laboratory per term
- Prerequisite: DANCE 144 or equivalent
A modern dance course for the advanced student. This class will focus on advanced axial and locomotor movements, styles from early modern, post-modern, and contemporary modern innovators. Students will also learn basic choreographic principles as they relate to modern dance. CSU

DANCE-201 Western Culture Dance History: 20th Century to Present
3 units SC
- 54 hours lecture per term
- May be repeated three times
A study of the role of dance within Western culture, from the 20th century through the present day. The course includes the Diaghilev period of ballet, the introduction of modern dance, and their influences on today's ballet, modern and contemporary dance. CSU, UC

DANCE-205 Rhythmic Analysis for Dancers
2 units SC
- May be repeated once
- 18 hours lecture/54 hours laboratory per term
- Note: Previous experience in any dance technique is suggested
- Formerly PEDAN 131
Exploration of rhythm, meter, 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

DANCE-240 Dance Choreography
2 units SC
- May be repeated once
- 18 hours lecture/54 hours laboratory per term
- Formerly PEDAN 140
Choreographic skills developed through dance movement phrasing, spatial design and relationships, rhythm, theme development, concert, solo and group work. CSU, UC

DANCE-244 Repertory Dance Production
2 units SC
- May be repeated three times
- 108 hours laboratory per term
- Recommended: Previous dance experience or equivalent
A dance performance class with an emphasis on experiential learning from participation in the planning, staging, rehearsing and performing of a faculty-choreographed dance production. CSU
DANCE-245 Dance Production
1-2 units SC
- May be repeated three times
- Variable hours
- Formerly PEDAN 145

This course involves the creation and staging of original student dance compositions. It includes the study of theory and technique with emphasis on dance as a perform art and participation in the technical and business aspects of a student production. A final dance concert performed by the students will culminate the term's work. CSU, UC

Dental assisting – DENTL

Biological and Health Sciences Division
Diane Smith, Interim Dean
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 dentist.

Certificate of achievement - 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 college 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.

<table>
<thead>
<tr>
<th>Program requirements</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>General education requirements</td>
<td>26-38</td>
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<tr>
<td>Major requirements</td>
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<tr>
<td>DENTL 120 Orientation to the Dental Assisting Program</td>
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<tr>
<td>DENTL 171 Oral Facial Structures and Body Systems</td>
<td>3.5</td>
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<tr>
<td>DENTL 172 Dental Radiography I</td>
<td>2</td>
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<tr>
<td>DENTL 173 Dental Operative Procedures I</td>
<td>2.5</td>
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<tr>
<td>DENTL 174 Dental Materials and Laboratory Procedures</td>
<td>2.5</td>
</tr>
<tr>
<td>DENTL 175 Infection Control, Oral Inspection and Theories of Dental Assisting</td>
<td>2.5</td>
</tr>
<tr>
<td>DENTL 180 Office Management</td>
<td>3</td>
</tr>
<tr>
<td>DENTL 181 Dental Emergencies, Pharmacology and Oral Pathology</td>
<td>2</td>
</tr>
<tr>
<td>DENTL 182 Dental Radiography II</td>
<td>2.5</td>
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<tr>
<td>DENTL 183 Advanced Dental Operative Procedures</td>
<td>4.5</td>
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<td>DENTL 184 Clinical Experience</td>
<td>7</td>
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<tr>
<td>ENGL 122 Freshman English: Composition and Reading I</td>
<td>3</td>
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<tr>
<td>PSYCH 122 Psychology in Modern Life</td>
<td>3</td>
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<tr>
<td>SPCH 121 Persuasion and Critical Thinking</td>
<td>3</td>
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Total units for the major 41.3

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<tr>
<th>Electives</th>
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<tbody>
<tr>
<td>From a selection of degree applicable courses</td>
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Total units for the degree 60-65.3

Certificate of achievement - Dental assisting

This program 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 leads to the certificate of achievement in dental assisting. To earn a certificate, students must complete each course used to meet a certificate requirement with a "C" grade or better. Requirements for dental assisting courses are only available in the day. However, required 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 certificate 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 the bachelor degree at selected campuses of CSU or the bachelor of arts in health administration in private universities. Consult with college counselors for more information.

To be eligible for enrollment in the dental assisting program, students must complete the specified prerequisite course DENTL 120 (6 hour course), which is offered in 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.

program prerequisite

DENTL 120 Orientation to the Dental Assisting Program... 0.3

required course  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>DENTL 171</td>
<td>Oral Facial Structures and Body Systems</td>
<td>3.5</td>
</tr>
<tr>
<td>DENTL 172</td>
<td>Dental Radiography I</td>
<td>2</td>
</tr>
<tr>
<td>DENTL 173</td>
<td>Dental Operative Procedures I</td>
<td>2.5</td>
</tr>
<tr>
<td>DENTL 174</td>
<td>Dental Materials and Laboratory Procedures</td>
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<td>DENTL 175</td>
<td>Infection Control, Oral Inspection and Theories of Dental Assisting.</td>
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<td>DENTL 180</td>
<td>Office Management</td>
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<tr>
<td>DENTL 181</td>
<td>Dental Emergencies, Pharmacology and Oral Pathology</td>
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<tr>
<td>DENTL 182</td>
<td>Dental Radiography II</td>
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</tr>
<tr>
<td>DENTL 183</td>
<td>Advanced Dental Operative Procedures</td>
<td>4.5</td>
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<tr>
<td>DENTL 184</td>
<td>Clinical Experience</td>
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plus at least 3 units from:

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>BUS 101*</td>
<td>Business English</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 118*</td>
<td>College Writing Development</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 122*</td>
<td>Freshman English: Composition and Reading I</td>
<td>3</td>
</tr>
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plus at least 3 units from:

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<tr>
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<tbody>
<tr>
<td>PSYCH 122*</td>
<td>Psychology in Modern Life</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 210*</td>
<td>General Psychology</td>
<td>3</td>
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<th>Units</th>
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</thead>
<tbody>
<tr>
<td>SPCH 120*</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 121*</td>
<td>Persuasion and Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 128*</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units required 41.3

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 regularity 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 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, Oral Inspection, and Theories 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 ENGL 122 or equivalent
- Note: medical exam, TB clearance, hepatitis immunization, malpractice insurance, and current CPR (GLS for 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 for Health Care Provider with AED)

Advanced studies and manipulative skills in the specialties of dentistry. These specialties include: orthodontics, pediatricics, 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  P/NP
- 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  P/NP
- 4.5 hours lecture/8 hours laboratory per term
- Note: current CPR certificate (GLS 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

The following courses are open only to those accepted into the dental hygiene program.

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 State Board 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 edu-
Dental hygiene

cation 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. 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, Counseling Office or DVC website.

**general education requirements** ............................................. 26-38

**program prerequisites or equivalents**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOSC 120*</td>
<td>Introduction to Human Anatomy and Physiology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 108*</td>
<td>Introductory Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 109*</td>
<td>Introduction to Organic and Biochemistry</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 122</td>
<td>Freshman English: Composition and Reading I</td>
<td>3</td>
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<tr>
<td>NUTRI 160*</td>
<td>Nutrition: Science and Applications</td>
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**plus at least 4 units from:**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BIOSC 119*</td>
<td>Fundamentals of Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>BIOSC 146*</td>
<td>Principles of Microbiology</td>
<td>5</td>
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</table>

**Total prerequisite units** 23-24

*These courses must have been completed within the past five years.

**major requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>DENHY 120</td>
<td>Introduction to Dental Hygiene: Theory, Process of Care and Practice</td>
<td>2</td>
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<tr>
<td>DENHY 121</td>
<td>Introduction to Comprehensive Clinical Dental Hygiene Care</td>
<td>4</td>
</tr>
<tr>
<td>DENHY 122</td>
<td>Clinical Dental Hygiene</td>
<td>4</td>
</tr>
<tr>
<td>DENHY 123</td>
<td>Oral Health Education and Care</td>
<td>2</td>
</tr>
<tr>
<td>DENHY 124</td>
<td>Fundamentals of Radiology for the Dental Hygienist</td>
<td>2</td>
</tr>
<tr>
<td>DENHY 125</td>
<td>Head/Neck Anatomy, Histology, and Embryology</td>
<td>4</td>
</tr>
<tr>
<td>DENHY 126</td>
<td>Dental Morphology</td>
<td>2</td>
</tr>
<tr>
<td>DENHY 127</td>
<td>Disease Prevention through Communication and Infection Control Strategies</td>
<td>2</td>
</tr>
<tr>
<td>DENHY 128</td>
<td>Periodontics for the Dental Hygienist</td>
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<tr>
<td>DENHY 129</td>
<td>Contemporary Dental Materials for the Dental Hygienist</td>
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<tr>
<td>DENHY 130</td>
<td>Clinical Dental Hygiene II</td>
<td>2</td>
</tr>
<tr>
<td>DENHY 131</td>
<td>Local Anesthesia</td>
<td>1</td>
</tr>
<tr>
<td>DENHY 132</td>
<td>Community Oral Health</td>
<td>2</td>
</tr>
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<td>DENHY 133</td>
<td>Behavioral Foundation and Communication Skills</td>
<td>1</td>
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<tr>
<td>DENHY 219</td>
<td>Pathology</td>
<td>2</td>
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<td>DENHY 220</td>
<td>Pharmacology for the Dental Hygienist</td>
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</tr>
<tr>
<td>DENHY 223</td>
<td>Ethics, Jurisprudence, and Practice Management</td>
<td>2</td>
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<tr>
<td>DENHY 224</td>
<td>Integration of Dental Hygiene and Dentistry</td>
<td>1.5</td>
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<tr>
<td>DENHY 227</td>
<td>Advanced Periodontal Dental Hygiene Care</td>
<td>2</td>
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<td>DENHY 230</td>
<td>Advanced Clinical Dental Hygiene Care I</td>
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<td>DENHY 231</td>
<td>Advanced Clinical Dental Hygiene Care II</td>
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<tr>
<td>PSYCH 122</td>
<td>Psychology in Modern Life</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO 120</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 121</td>
<td>Persuasion and Critical Thinking</td>
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</table>

**Total major units** 63.5

**Additional general education 15-20 units**

**Total units for the degree** 101.5-108.5

**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 State Board 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, Counseling Office or DVC website.

**program prerequisites or equivalents**

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<td>4</td>
</tr>
<tr>
<td>BIOSC 146*</td>
<td>Principles of Microbiology</td>
<td>5</td>
</tr>
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</table>

**Total prerequisite units** 23-24

*These courses must have been completed within the past five years.
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Type</th>
<th>Notes</th>
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<tr>
<td>DENHY 120</td>
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<td>36 hours lecture per term</td>
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<td></td>
<td>Care and Practice</td>
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<td></td>
<td>Prerequisite: RDH, eligible for California</td>
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<td>Registered Dental Hygienist (RDH) Exam</td>
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<td>Note: enrollment into the dental hygiene</td>
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<td>program; TB clearance and medical exam</td>
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<tr>
<td>DENHY 121</td>
<td>Introduction to Comprehensive Clinical Dental</td>
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<td></td>
<td>Hygiene Care</td>
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<td>Prerequisite: RDH, RDH-TAB</td>
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<td>DENHY 122</td>
<td>Clinical Dental Hygiene I</td>
<td>2</td>
<td>LR</td>
<td>36 hours lecture/108 hours laboratory per</td>
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<td></td>
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<tr>
<td>DENHY 124</td>
<td>Fundamentals of Radiology for the Dental</td>
<td>2</td>
<td>LR</td>
<td>36 hours lecture/108 hours laboratory per</td>
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<tr>
<td></td>
<td>Hygienist</td>
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<td>term</td>
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<tr>
<td>DENHY 125</td>
<td>Head/Neck Anatomy, Histology, and Embryology</td>
<td>4</td>
<td>LR</td>
<td>36 hours lecture/108 hours laboratory per</td>
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<td>term</td>
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<tr>
<td>DENHY 126</td>
<td>Dental Morphology</td>
<td>2</td>
<td>LR</td>
<td>36 hours lecture/108 hours laboratory per</td>
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<td></td>
<td></td>
<td></td>
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<td>term</td>
</tr>
<tr>
<td>DENHY 127</td>
<td>Infection Control: Theory, Practice and</td>
<td>2</td>
<td>LR</td>
<td>36 hours lecture/108 hours laboratory per</td>
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<tr>
<td></td>
<td>Communication</td>
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<tr>
<td>DENHY 128</td>
<td>Periodontics for the Dental Hygienist</td>
<td>2</td>
<td>LR</td>
<td>36 hours lecture/108 hours laboratory per</td>
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<tr>
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<td>term</td>
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<tr>
<td>DENHY 129</td>
<td>Contemporary Dental Materials for the Dental</td>
<td>1.5</td>
<td>LR</td>
<td>36 hours lecture/108 hours laboratory per</td>
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<tr>
<td></td>
<td>Hygienist</td>
<td></td>
<td></td>
<td>term</td>
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<tr>
<td>DENHY 130</td>
<td>Clinical Dental Hygiene II</td>
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<td>LR</td>
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<td>DENHY 131</td>
<td>Local Anesthesia</td>
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<td>LR</td>
<td>36 hours lecture/108 hours laboratory per</td>
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<td></td>
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<td></td>
<td>term</td>
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<tr>
<td>DENHY 132</td>
<td>Community Oral Health</td>
<td>2</td>
<td>LR</td>
<td>36 hours lecture/108 hours laboratory per</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>term</td>
</tr>
<tr>
<td>DENHY 133</td>
<td>Behavioral Foundation and Communication Skills</td>
<td>1</td>
<td>LR</td>
<td>36 hours lecture/108 hours laboratory per</td>
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<td></td>
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<td>term</td>
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<tr>
<td>DENHY 191</td>
<td>Pathology</td>
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<td>DENHY 220</td>
<td>Pharmacology for the Dental Hygienist</td>
<td>3</td>
<td>LR</td>
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<td>DENHY 222</td>
<td>Ethics, Jurisprudence, and Practice Management</td>
<td>2</td>
<td>LR</td>
<td>36 hours lecture/108 hours laboratory per</td>
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<td>DENHY 224</td>
<td>Integration of Dental Hygiene and Dentistry</td>
<td>1.5</td>
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<td>DENHY 227</td>
<td>Advanced Periodontal Dental Hygiene Care</td>
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<td>36 hours lecture/108 hours laboratory per</td>
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<td>DENHY 230</td>
<td>Advanced Clinical Dental Hygiene Care I</td>
<td>6</td>
<td>LR</td>
<td>36 hours lecture/108 hours laboratory per</td>
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<td></td>
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<tr>
<td>DENHY 231</td>
<td>Advanced Clinical Dental Hygiene Care II</td>
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<td>LR</td>
<td>36 hours lecture/108 hours laboratory per</td>
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<td></td>
<td>Total certificate units</td>
<td>86.5-87.5</td>
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</table>

**DENHY-099 RDH Examination Preparation**

- 0.5 unit P/NP
- May be repeated three times
- Non degree applicable
- 27 hours lecture per term
- Prerequisite: eligible for California Registered Dental Hygienist (RDH) Examination

Additional clinical dental hygiene experience with emphasis on the RDH Examination: patient selection, preparation and with self/peer evaluation to enhance performance on the State of California license examination.
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 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 II
2 units LR
- 18 hours lecture/54 hours laboratory per term
- Prerequisite: DENHY-127 or equivalent
- Note: current certificate in CPR

The course emphasis is on refining skills associated with preventive 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: DENHY-127 or equivalent
- Note: current certificate in CPR and enrollment into the Dental Hygiene Program required

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 com-
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-223 Ethics, Jurisprudence, and Practice Management
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 I

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 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 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.

DENHY-231 Advanced Clinical Dental Hygiene Care II

6.5 units LR
- 18 hours lecture/306 hours laboratory per term
- Prerequisite: completion of the first year of the dental hygiene program
- Note: current certificate in CPR

This course is a continuation of the advanced clinical dental hygiene care course designed to lead toward the achievement of clinical competence in preventive oral health care, 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.

Dental laboratory technology – DENTE

The following courses are open only to those accepted into the dental laboratory technology program.

- Biological and Health Sciences Division
- Diane Smith, Interim Dean
- Science Center Building 102
- 925-685-1230 x 2442

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.

Associate in science degree
- Dental laboratory technology

Certificate of achievement
- Dental laboratory technology

Associate in science degree - Dental laboratory 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 and Records Office.

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 and Records Office.

General education requirements ........................................... 26-38

Major requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENTE 120</td>
<td>Orientation, Ethics, Jurisprudence, and History of Dentistry</td>
<td>1</td>
</tr>
<tr>
<td>DENTE 122</td>
<td>Introduction to Dental Materials</td>
<td>1</td>
</tr>
<tr>
<td>DENTE 124</td>
<td>Introduction to Dental Morphology</td>
<td>2</td>
</tr>
<tr>
<td>DENTE 236</td>
<td>Dental Anatomy and Morphology</td>
<td>2</td>
</tr>
<tr>
<td>DENTE 237</td>
<td>Intermediate Crown and Bridge Techniques</td>
<td>2</td>
</tr>
<tr>
<td>DENTE 238</td>
<td>Advanced Crown and Bridge Techniques</td>
<td>4</td>
</tr>
<tr>
<td>DENTE 240</td>
<td>Introduction to Dental Ceramics</td>
<td>2</td>
</tr>
<tr>
<td>DENTE 242</td>
<td>Dental Ceramics Substructure and Designs</td>
<td>4</td>
</tr>
<tr>
<td>DENTE 250</td>
<td>Practical Fixed and Removable Techniques</td>
<td>2</td>
</tr>
</tbody>
</table>

Total units for the major .............................................. 20
electives
units from a selection of degree applicable courses .......... 2-13
Total units for the degree 60

recommended courses
BUSMG 191 Small Business Management.................... 3
COOP 170 Occupational Work Experience.................. 1-4
DENTL 110 Overview of the Dental Profession.............1.5
PHYSC 112 Fundamentals of Physical Science ............ 3

Certificate of achievement - Dental laboratory 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.

For an information sheet describing admission requirements, contact the Admissions and Records Office.

required courses units
DENTE 120 Ethics, Jurisprudence, and History of Dentistry ................................................................. 1
DENTE 122 Introduction to Dental Materials ............................................. 1
DENTE 124 Introduction to Dental Morphology .................. 2
DENTE 235 Intermediate Crown and Bridge Techniques ......................................................... 2
DENTE 238 Advanced Crown and Bridge Techniques...... 4
DENTE 240 Introduction to Dental Ceramics ..................... 2
DENTE 242 Dental Ceramics Substructure and Designs .... 4
DENTE 250 Practical Fixed and Removable Techniques ................................................................. 2

Total units required 20

recommended courses
BUSMG 191 Small Business Management.................... 3
COOP 170 Occupational Work Experience.................. 1-4
DENTL 110 Overview of the Dental Profession.............1.5
ENGL 122 Freshman English: Composition and Reading I ................................................................. 3
PHYSC 112 Fundamentals of Physical Science ............ 3

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 opaquing, 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

DENTE-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

DENTE-252 Prosthodontic Custom Provisionals 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 – DRAMA

Applied and Fine Arts Division
Michael Almaguer, Interim Dean
Humanities Building 112 and 113
925-685-1230 x 2312

Possible career opportunities
Most careers related to theatre require education beyond the associate degree, however, an understanding and mastery of technical theatre skills provides some preparation for work in local community and professional theatre. Possible career options include: set designer, model builder, makeup artist, lighting designer, stage manager, scenic artist, set builder, set carpenter, set painter, stage technician, sound technician, prop maker, and lighting operator.

Associate in arts degree
Technical theater

Certificate of achievement
Technical theater

The program in technical theatre prepares students for an entry-level career in community and professional theater. Careers may include scene shop technician, property artisan, electrician, costume technician, makeup technician, scenic artist, or stage manager. The program also prepares students who wish to expand their careers to entry-level technical video and film positions, as well as entry into a four-year university or professional school.

While this program of study is not designed as a transfer program, selected courses in the program meet lower division requirements for the bachelor of arts degree at many California State University and University of California campuses. Consult with department faculty and a college counselor for more information.

Students must complete each course used to meet a major or 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 and/or degree.

The technical theatre program is composed of seven core courses supplemented by fifteen restricted electives from which students select a minimum of nine units to meet their individual educational and career goals. The certificate program can also be used as the “major” that is required for the associate in arts degree in technical theatre at Diablo Valley College.

Associate in arts degree - Technical theater

<table>
<thead>
<tr>
<th>units</th>
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<tbody>
<tr>
<td>general education requirements ................................................. 26-38</td>
</tr>
</tbody>
</table>
**Drama**

**Certificate of achievement - Technical theater**

**Required courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRAMA 111</td>
<td>Fundamentals of Stage Production - Lighting</td>
<td>3</td>
</tr>
<tr>
<td>DRAMA 112</td>
<td>Stage Makeup</td>
<td>2</td>
</tr>
<tr>
<td>DRAMA 122</td>
<td>Basic Principles of Acting</td>
<td>3</td>
</tr>
<tr>
<td>DRAMA 139</td>
<td>Introduction to Theater</td>
<td>3</td>
</tr>
<tr>
<td>DRAMA 200</td>
<td>Introduction to Technical Theater</td>
<td>3</td>
</tr>
<tr>
<td>DRAMA 201</td>
<td>Technical Theater Laboratory</td>
<td>1-2</td>
</tr>
</tbody>
</table>

**Electives**

units from a selection of degree applicable courses: 0-6

**Total units for the major**: 27-29

**Total units for the degree**: 60-67

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**Drama**

**Programs and course descriptions**

**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 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 122: Basic 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-155 Topics in Drama  
1-3 units SC  
- May be repeated three times  
- Variable hours  
- Formerly DRAMA 290  
A supplemental course in drama to provide a study of current concepts, problems, and related subdivisions. Specific topics will be announced in the schedule of courses. 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
Early childhood education

DRAMA-180 Literature of World Drama: Pre-Greek to 17th Century
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: 17th Century to Present
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 three 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 condi-

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
Early childhood education

Certificates of achievement
Early childhood education - Basic
Early childhood education - Family daycare provider/foster care provider/in-home childcare provider
Early childhood education - Master teacher
Early childhood education - Site supervisor
Early childhood education - Teacher

Certificates of accomplishment
Early childhood education - Associate teacher
Early childhood education - Resource (foster) family specialist

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 .................................................. 26-88

major requirements
ECE 124 Child Development and Psychology ..................... 3
ECE 125 Introduction to Early Childhood Education .......... 3
ECE 128 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

recommended degree electives:

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.

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 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
units
ECE 124 Child Development and Psychology ..................... 3
ECE 126 Health, Safety and Nutrition for the Young Child ... 3
ECE 129 Dealing with Difficult and Aggressive Young 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 Special Needs in Young Children ........................................... 3

plus 2 units from:
ECE 245 Introduction to Day Care .......................... 1
ECE 246 Introduction to Foster Parenting .................. 1.5
ECE 247 Issues of Foster Parenting .......................... 1

Total units required .................................................. 20.5
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.

Therefore 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.

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 124 Child Development and Psychology</td>
<td>3</td>
</tr>
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<td>ECE 125 Introduction to Early Childhood Education</td>
<td>3</td>
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<tr>
<td>ECE 249 Introduction to ECE Theory and Practice</td>
<td>4</td>
</tr>
<tr>
<td>ECE 250 ECE Theory and Practice</td>
<td>4</td>
</tr>
<tr>
<td>ECE 253 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
ECE 237 Topics in Current Theory, Research and Implementation | 0.5-3 |
ECE 242 Music for the Young Child | 2 |
ECE 243 Creative Art for the Young Child | 1 |
or one elective from ART 155, 160; or PEDAN 129, 130, 138, 139, 142, or DRAMA 150; or MUSIC 101, 102, 120, 150, 151, 171, or MUSLT 112 | 1 |

Family day care/Foster care provider
ECE 245 Introduction to Day Care | 1 |
ECE 246 Introduction to Foster Parenting | 1.5 |
ECE 247 Issues of Foster Parenting | 1 |

Infants and toddlers
ECE 230 Infant and Toddler Care | 3 |
ECE 231 Infants and Toddlers: Issues and Applications | 3 |

Language and literature
ENGL 177 Children's Literature | 3 |
ECE 237* Topics in Current Theory, Research and Implementation | 0.5-3 |
ECE 240 Language, Literacy, and Literature for the Young Child | 3 |
L 111 Storytelling | 2 |

Science and math
ECE 127 Nutrition and the Young Child | 1 |
ECE 237* Topics in Current Theory, Research and Implementation | 0.5-3 |
ECE 241 Science and Mathematics for Early Childhood Education | 3 |

(Note: Two ECE 237 courses in this category are required)

Sign language
SIGN 266 Sign Language: SEE I | 3 |
SIGN 267 Sign Language: SEE II | 3 |
SIGN 268 Sign Language: SEE III | 3 |
SIGN 280 American Sign Language (ASL) I | 3 |
SIGN 281 American Sign Language (ASL) II | 3 |
SIGN 282 American Sign Language (ASL) III | 3 |

Special needs
ECE 129 Dealing with Difficult and Aggressive Young Children | 3 |
ECE 137 Issues of Separation and Loss with Children and Families | 3 |
ECE 263 The Special Needs Child - Speech, Language and Hearing | 1 |
ECE 265 Working with Young Children with Special Needs | 2 |
ECE 269 Introduction to Special Needs in Young Children | 3 |

Or any Sign Language course:
SIGN 266, 267, 268, 280, 281, or 282 | 3 |

plus at least 16 units from:
general education courses | 16 |
(At least one course each from humanities, social science, science or math, and English)

Total units required | 50-51 |

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.

*Three units are required for the certificate program.

*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.
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.

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>The same courses as required for the Early Childhood Education Master Teacher Certificate</td>
<td>50-51</td>
</tr>
</tbody>
</table>

plus 9 units:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 129</td>
<td>Dealing with Difficult and Aggressive Young Children</td>
<td>3</td>
</tr>
<tr>
<td>ECE 251</td>
<td>Administration and Supervision of Early Childhood Education Programs</td>
<td>3</td>
</tr>
<tr>
<td>ECE 252</td>
<td>Staff Development and Supervision for ECE Programs</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units required 59-60

Certificate of accomplishment - Early childhood education - Teacher

This certificate meets 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.

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 124 Child Development and Psychology</td>
<td>3</td>
</tr>
<tr>
<td>ECE 125 Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 128 Curriculum Development for Young Children</td>
<td>3</td>
</tr>
<tr>
<td>ECE 130 Child, Family and Community</td>
<td>3</td>
</tr>
<tr>
<td>ECE 137 Issues of Separation and Loss with Children</td>
<td>3</td>
</tr>
<tr>
<td>Total units required</td>
<td>12</td>
</tr>
</tbody>
</table>

Certificate of accomplishment - Early childhood Education - Resource (foster) family specialist

This certificate meets the educational requirements for caregivers of children in out of home placement in Contra Costa County, including all resource families who were previously categorized as foster care providers, foster-adopt families, relative caregivers, non-relative extended family members and group home staff.

To earn a certificate of accomplishment, students must complete each course with a grade of "C" or better. Certificate requirements can be completed by attending classes in the day, evening or weekends.

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 246 Introduction to Foster Parenting</td>
<td>1.5</td>
</tr>
<tr>
<td>ECE 248 Child, Family, and Foster/Kin Care</td>
<td>1</td>
</tr>
</tbody>
</table>

plus at least 7 units from one of the 3 specialty areas listed below:

Providing care for children aged 0-5 years

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 129*</td>
<td>Dealing with Difficult and Aggressive Young Children</td>
<td>1</td>
</tr>
<tr>
<td>ECE 137*</td>
<td>Issues of Separation and Loss with Children and Families</td>
<td>3</td>
</tr>
<tr>
<td>ECE 150</td>
<td>Topics in Child Development</td>
<td>1-3</td>
</tr>
<tr>
<td>ECE 156</td>
<td>Topics for Caregivers 0-5 Years</td>
<td>0.3-4</td>
</tr>
<tr>
<td>ECE 247</td>
<td>Issues of Foster Parenting</td>
<td>1</td>
</tr>
<tr>
<td>ECE 263*</td>
<td>The Special Needs Child: Speech, Language, and Hearing Development</td>
<td>1</td>
</tr>
<tr>
<td>ECE 265*</td>
<td>Working with Young Children with Special Needs</td>
<td>2</td>
</tr>
<tr>
<td>ECE 269*</td>
<td>Introduction to Special Needs in Young Children</td>
<td>3</td>
</tr>
</tbody>
</table>

Providing care for children aged 6-11 years

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 129*</td>
<td>Dealing with Difficult and Aggressive Young Children</td>
<td>3</td>
</tr>
<tr>
<td>ECE 137*</td>
<td>Issues of Separation and Loss with Children and Families</td>
<td>3</td>
</tr>
<tr>
<td>ECE 157</td>
<td>Topics for Caregivers in Out-of-Home Placement</td>
<td>0.3-4</td>
</tr>
<tr>
<td>ECE 220</td>
<td>Programs for the School Age Child</td>
<td>3</td>
</tr>
<tr>
<td>ECE 247</td>
<td>Issues of Foster Parenting</td>
<td>1</td>
</tr>
</tbody>
</table>
ECE 263* The Special Needs Child: Speech, Language, and Hearing Development........................................... 1
ECE 265* Working with Young Children with Special Needs ................................................................. 2
ECE 269* Introduction to Special Needs in Young Children ...................................................................... 3

*Note: there may be no duplication of coursework in these two specialty areas.

Providing care for youth aged 12-18 years

ECE 060 Life Skills for Emancipating Youth I...................... 1
ECE 061 Life Skills for Emancipating Youth II...................... 1
ECE 158 Topics for Caregivers of Children in Out-of-Home Placement II.......................... 0.3-4
ECE 247 Issues of Foster Parenting ........................................ 1
ECE 268 Meeting the Developmental Needs of Youth at-Risk 12-18 Years........................... 1

or students may select one of the following courses:

COUNS 115 Resiliency and Student Success......................... 1
PSYCH 115 Resiliency and Student Success......................... 1

Total units required 9.5

ECE-060 Life Skills for Emancipating Youth I
1.5 units. P/NP
• Non degree applicable
• 27 hours lecture per term

This class begins to introduce the life skills necessary for youth who have been in out-of-home placement to begin living independent from the court system. The course is also open to professionals interested in assisting youth through the emancipation process. Anger management methods, self-esteem building exercises, positive communication techniques, and employment skills will be presented. Students will receive hands-on help completing the Vocational Assessment/Personality Inventory and Ansell Casey Prescription for Emancipation Readiness.

ECE-061 Life Skills for Emancipating Youth II
1.5 units. P/NP
• Non degree applicable
• 27 hours lecture per term
• Recommended: ECE 060 or equivalent

This class continues to teach students a variety of independent living skills that were introduced in ECE 060. Topics include: money management, housing, employment skills, and community resources are addressed. Students receive hands-on help completing forms and applications to get started in a college or vocational training program of their choice. The course is designed for youths about to leave court control as well as professionals interested in assisting youth through the emancipation process.

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. P/NP
• 18 hours lecture per term
• Recommended: 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
# Early childhood education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Hours</th>
<th>Notes and Requirements</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE-128</td>
<td>Curriculum Development for Young Children</td>
<td>3</td>
<td>SC</td>
<td>- 54 hours lecture per term</td>
<td>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</td>
</tr>
<tr>
<td>ECE-129</td>
<td>Dealing with Difficult and Aggressive Young Children</td>
<td>3</td>
<td></td>
<td>- 54 hours lecture per term</td>
<td>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</td>
</tr>
<tr>
<td>ECE-130</td>
<td>Child, Family, and Community</td>
<td>3</td>
<td>SC</td>
<td>- 54 hours lecture per term</td>
<td>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</td>
</tr>
<tr>
<td>ECE-134</td>
<td>Topics in Family Communication and Interaction</td>
<td>3-4</td>
<td>SC</td>
<td>- May be repeated three times</td>
<td>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, stepparents and foster child care parents. Specific topics will be announced in the schedule of courses. CSU</td>
</tr>
<tr>
<td>ECE-137</td>
<td>Issues of Separation and Loss with Children and Families</td>
<td>3</td>
<td></td>
<td>- 54 hours lecture per term</td>
<td>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</td>
</tr>
<tr>
<td>ECE-140</td>
<td>Creative Activities for Young Children</td>
<td>3</td>
<td></td>
<td>- 54 hours lecture per term</td>
<td>A hands-on broad scope curriculum course which covers many of the major components of quality programs for children. The focus is on “Developmentally Appropriate Practice” in various content areas such as art, science, literature, storytelling, dramatic play, puppetry, literacy, music, outdoor environments and circle time. CSU</td>
</tr>
<tr>
<td>ECE-144</td>
<td>Diversity in Early Childhood Education Classrooms</td>
<td>3</td>
<td></td>
<td>- 54 hours lecture per term</td>
<td>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</td>
</tr>
<tr>
<td>ECE-150</td>
<td>Topics in Child Development</td>
<td>1-3</td>
<td>P/NP</td>
<td>- May be repeated three times</td>
<td>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</td>
</tr>
</tbody>
</table>
ECE-151  Topics in Cognitive Development
1-3 units  P/NP
• 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  P/NP
• 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  P/NP
• 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  P/NP
• 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  P/NP
• 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

A 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 I
.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 II  
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, caregiving 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 230  
• 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  
• May be repeated three times  
• Variable hours  
• Recommended: eligibility for ENGL 122 or equivalent  
• Note: meets the State Department of Social Services licensing requirement for DSS III, Program and Curriculum Development, if taken for 3 units, and the course is a curriculum course.  
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 of courses. 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**

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-245  Introduction to Family Child Care

**1 unit  P/NP**

- **18 hours lecture per term**

A course designed to expand child care providers general knowledge of child development, guidance, enriched early childhood activities, and signals which alert the provider to a child's special needs. CSU

### ECE-246  Introduction to Foster Parenting

**1.5 units  P/NP**

- **27 hours lecture per term**

Designed primarily for new foster parents and adopting parents. Describes the role of the social service agency, the special needs of children in foster care, and the rights, roles and responsibilities of foster and adopting families. CSU

### ECE-247  Issues of Foster Parenting

**1 unit  P/NP**

- **18 hours lecture per term**

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-248  Child, Family and the Foster/Kin Care Community

**1 unit  P/NP**

- **18 hours lecture per term**

This course is an introduction to the issues in early childhood education of the foster/kin care children. It relates to the entire learning environment of a child with an emphasis on the foster family, family of origin, and the community. An examination of the impact on a child by the variety of family systems including ethnic and subculture variations. A 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-249  Introduction to Early Childhood Education Theory and Practice

**4 units  SC**

- **36 hours lecture/108 hours laboratory per term**

**Prerequisite:** ECE 124 or equivalent and ECE 125 or equivalent (may be taken concurrently)

**Recommended:** eligibility for ENGL 122 or equivalent

**Note:** 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, 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 or equivalent; eligibility for ENGL 122 or equivalent  
- Note: meets the State Department of Social Services licensing requirement for DSS VI, Supervision and Administration  

Required for those who plan to be directors in an early childhood program, both public and private, in the state of California. Course includes 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  
- 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-263  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

ECE-265  Working with Young Children with Special Needs  
2 units  SC  
- 36 hours lecture per term  
- Recommended: ECE 124 or equivalent; eligibility for ENGL 122 or equivalent  

An in-depth exploration of the strategies of working and/or living with children with special needs. Focus will be on various types of disabling conditions encountered 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-266  Meeting the Developmental Needs of Children at Risk 0-5 Years  
1 unit  P/NP  
- 18 hours lecture per term  
- Recommended: eligibility for ENGL 122 or equivalent  

A study of normal and abnormal human development and behavior from conception through 5 years of age. Focus on examples and principal theories basic to physiological, social, and psychological determinants of behavior. CSU

ECE-267  Meeting the Developmental Needs of Children at Risk 6-11 Years  
1 unit  P/NP  
- 18 hours lecture per term  
- Recommended: eligibility for ENGL 122 or equivalent  

A study of normal and abnormal human development and behavior from age 6 through 11. Focus on examples and principal theories basic to physiological, social, and psychological determinants of behavior. CSU

ECE-268  Meeting the Developmental Needs of Youth at Risk 12-18 Years  
1 unit  P/NP  
- 18 hours lecture per term  
- Recommended: eligibility for ENGL 122 or equivalent  

A study of normal and abnormal human development and adolescent behavior. Focus on examples and principal theories basic to physiological, social, and psychological determinants of behavior. CSU

ECE-269  Introduction to Special Needs in Young Children  
3 units  SC  
- 54 hours lecture per term  
- Recommended: ECE 124 or equivalent and eligibility for ENGL 122 or equivalent  

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

Education – EDUC

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

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
• 45 hours lecture/27 hours laboratory by arrangement 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 27 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**
- **45 hours lecture/27 hours laboratory by arrangement 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

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**Electricity – ELECT**

Physical Sciences and Engineering Division
Dennis Smith, Dean
Physical Sciences Building 261
925-685-1230 x 2359

**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-130 Motors and Motor Controllers**

- **4 units SC**
- **54 hours lecture/54 hours laboratory per term**
- **Recommended: ELECT 120 or equivalent**

Students in this course will gain hands-on experience with the function, operation and characteristics of various types of direct current, single phase and three phase motors. The students will work with control devices and systems used for motor controls. 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: Articles 90-398**

- **3 units SC**
- **May be repeated once**
- **54 hours lecture per term**
- **Recommended: CONST 170 or equivalent**
- **Note: same as CONST 266. May be repeated when code changes.**

Interpretation of the National Electrical Code for general requirements, wiring and protection, wiring methods and materials (articles 90-398). Safety installation practices will be applied.

**ELECT-267 Electrical Codes: Article 400-830**

- **3 units SC**
- **May be repeated once**
- **54 hours lecture per term**
- **Recommended: CONST 170 or equivalent**
- **Note: same as CONST 267. May be repeated when code changes.**

Interpretation of the National Electrical Code for equipment for general use, special occupancies and special equipment (articles 400-830). Safety installation practices will be applied.

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**Electronics – ELTRN**

Physical Sciences and Engineering Division
Dennis Smith, Dean
Physical Sciences Building 261
925-685-1230 x 2359

**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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMTC 110B</td>
<td>4</td>
</tr>
<tr>
<td>ELTRN 120 DC Circuits</td>
<td>4</td>
</tr>
<tr>
<td>ELTRN 121 AC Circuits</td>
<td>4</td>
</tr>
<tr>
<td>ELTRN 102B Linear Circuits</td>
<td>4</td>
</tr>
<tr>
<td>ELTRN 140 Electronics Fabrication</td>
<td>2</td>
</tr>
<tr>
<td>ELTRN 271 Programmable Logic Controllers</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total units required** 22

**recommended course**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMTC 115 A+ Exam Preparation</td>
<td>2</td>
</tr>
</tbody>
</table>

**ELTRN-102B Linear Circuits**

4 units  LR
- 54 hours lecture/54 hours laboratory per term
- Formerly ELTRN 101A

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
- Note: can be repeated when hardware/software changes.

The course will introduce students to 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

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-120 DC Circuits**

4 units  LR
- 54 hours lecture/54 hours laboratory per term
- Formerly ELTRN 101A

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 lab experience, including use of software to simulate electrical circuits. CSU

**ELTRN-121 AC Circuits**

4 units  LR
- 54 hours lecture/54 hours laboratory per term
- Formerly ELTRN 101B

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-140 Electronics Fabrication**

2 units  LR
- May be repeated once
- 27 hours lecture/27 hours laboratory per term
- Recommended: ELTRN 201A 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

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

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
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 accomplishment
Drafting with CAD

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 satisfy both a major and a DVC general education requirement; however the units are only counted once.

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.
Certificate of achievement - Civil drafting, CAD

This certificate program prepares students for an entry level training position in jobs requiring them to prepare and revise technical drawings used in civil engineering and surveying.

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</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGIN 222</td>
<td>Principles of Structural Steel Drafting</td>
</tr>
<tr>
<td>ENGIN 223</td>
<td>Principles of Pipe Drafting</td>
</tr>
<tr>
<td>ENGIN 298</td>
<td>Independent Studies</td>
</tr>
<tr>
<td>ENGIN 111</td>
<td>Mathematics for Technicians</td>
</tr>
<tr>
<td>MATH 121</td>
<td>Plane Trigonometry</td>
</tr>
</tbody>
</table>

plus at least 3 units from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>ENGIN 111</td>
<td>Mathematics for Technicians</td>
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</tr>
<tr>
<td>ENGIN 223</td>
<td>Principles of Pipe Drafting</td>
</tr>
<tr>
<td>ENGIN 298</td>
<td>Independent Studies</td>
</tr>
</tbody>
</table>

*Certain courses required for this certificate have recommended or 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

<table>
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<td>Plane Trigonometry</td>
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</tbody>
</table>

*Certain courses required for this certificate have recommended or prerequisite coursework that could add additional units.
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>
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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 111</td>
<td>Mathematics for Technicians</td>
<td>4</td>
</tr>
<tr>
<td>MATH 121*</td>
<td>Plane Trigonometry</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>
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<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>
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</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>ARTDM 160*</td>
<td>3D Modeling and Animation I</td>
<td>3</td>
</tr>
<tr>
<td>ENGIN 129</td>
<td>Introduction to Pro Engineer</td>
<td>4</td>
</tr>
<tr>
<td>ENGIN 222</td>
<td>Principles of Structural Steel Drafting</td>
<td>3</td>
</tr>
<tr>
<td>ENGIN 223</td>
<td>Principles of Pipe Drafting</td>
<td>3</td>
</tr>
<tr>
<td>ENGIN 298</td>
<td>Independent Studies</td>
<td>0.5-3</td>
</tr>
</tbody>
</table>

Total units required: 34-37

*Certain courses required for this certificate have recommended or prerequisite coursework that could add additional units.

### Certificate of Accomplishment - 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 accomplishment, 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 Urban Design</td>
<td>3</td>
</tr>
<tr>
<td>CONST 114</td>
<td>Blueprint Reading</td>
<td>2</td>
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</tbody>
</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>CONST 116</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>3</td>
</tr>
<tr>
<td>MATEC 120</td>
<td>Introduction to Machine Technology</td>
<td>4</td>
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</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>
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<tr>
<td>ENGIN 229</td>
<td>Advanced Concepts in Pro/Engineer</td>
<td>4</td>
</tr>
</tbody>
</table>

Total units required: 15-16

*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
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 drawing 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 auxiliary, 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 surveyor 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 I
3 units SC
- Prerequisite: ENGIN 119 and MATH 121 or equivalent
Fundamentals 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 II
3 units SC
- 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 subdivisions. Specific topics to be announced. CSU

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 ARCHI 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/wire-frame 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 SC
- 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
- Recommended: 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 determinate 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

English as a Second Language – ESL

ESL-067 ESL: Introduction to College English Skills
2 units P/NP
- Non degree applicable
- 18 hours lecture/54 hours laboratory per term
- Note: ESL assessment process before entering is recommended.
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
English as a Second Language

ESL-072  ESL: Pronunciation/Listening Skills
2 units  P/NP
- May be repeated once
- Non 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
- Non 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
- Non 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
- Non 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  P/NP
- May be repeated once
- Non 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
- Non 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; reading 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
- Non 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
- Non degree applicable
- 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.

ESL-096A Introduction to College Reading and Study Skills

3 units SC
- Non 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
- Non degree applicable
- 54 hours lecture/18 hours laboratory per term
- Recommended: ESL 086 and 088 or equivalent or eligibility for ESL 096A based on the result from the ESL assessment process

This course is designed for advanced ESL students to gain 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.

Possible career opportunities

Career options that are available through the study of English include: advertising copy writer, columnist, editor, information specialist, interpreter, lawyer, lexicographer, legislative assistant, publisher, researcher, teacher, technical writer, and writing consultant. Some career options may require more than two years of college study.

ENGL-090 Introduction to College English

2.5 units SC
- Non degree applicable
- 45 hours lecture per term
- Recommended: eligibility for ENGL 098 based on the reading/writing assessment process or ESL 098A

This supplemental course is designed to provide instruction in grammar, syntax, usage, punctuation and the writing process at an introductory level. The course will also cover the reading strategies necessary to write well. Weekly writing assignments will enable students to practice using the skills learned in class. This beginning course is intended to prepare students to succeed in basic skills English courses.

ENGL-091 Special Studies in Reading, Writing, Listening, Speaking Skills

1 unit P/NP
- May be repeated three times
- Non degree applicable
- 9 hours lecture/27 hours laboratory per term
- Recommended: ESL 096A based on the result from the ESL assessment process

A 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 P/NP
- Non degree applicable
- 36 hours lecture per term

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
- Non 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
• Non degree applicable
• 54 hours lecture/18 hours laboratory per term
• Recommended: reading/writing assessment process or ESL 098A
• 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
• Non 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
• Non 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, to make informed judgments about the style and syntax of the sentences they write, to 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 I
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  Critical Thinking: Composition and Literature
3 units  LR
• 54 hours lecture per term
• Prerequisite: ENGL 122 or equivalent
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. 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 or equivalent
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
- 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

### 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, orations, 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 Africa and America, 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-person 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 or equivalent

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 or equivalent
This course presents 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 a variety of socio-economic 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 artists’ works and an understanding of the historical, social, and psychological forces shaping literature and related arts, students should reach a heightened awareness of a gay and lesbian culture. Through criticism of and writing about these works, students should also reach a greater understanding of artistic excellence in general. 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 influences 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 or equivalent
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 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

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 criticism 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 or equivalent

This course surveys British literature of the nineteenth and twentieth centuries. Students will read poems, fiction, drama and non-fiction from the Romantic, Victorian, modern and post-colonial periods. Attention will be focused on the development of literary forms and the relation between texts and broader historical and cultural themes and conditions. Topics include representations of class, gender, race, nature, and the self; critical questions such as the function of literature, the conventions of literary periods, canonicity, and issues of literary production. Students will also examine the aesthetic and/or cultural relationship between literature and one other art form such as 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 exam-ined 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

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**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: Applications must be approved through Career and Employment Services. Students must be supervised by a DVC instructor.

Students work as instructional assistants, laboratory assistants and research assistants in the various departments on the campus. The instructional assistants function as group discus-
sion 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
Michael Almaguer, Interim Dean
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 P/NP
• 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 P/NP
• 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 P/NP
• 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  • 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  • 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  • 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 1950s 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  • 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 or equivalent
The purpose of this class is to learn to write screenplays. Therefore the student will study film forms 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 Script Writing - Intermediate
3 units  SC  • 54 hours lecture per term  • Prerequisite: FILM 290 or equivalent  • Recommended: eligibility for ENGL 122 or equivalent
The purpose of this class is to develop a student's ability to write for a visual medium. There will be numerous writing assignments and exercises as well as analysis of film and television scripts, scenarios and treatments. CSU

FILM-292  Fundamentals of Film Making - Beginning
3 units  SC  • 54 hours lecture per term  • Recommended: eligibility for ENGL 122 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 or equivalent

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

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.

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 accomplishment - 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 accomplishment, 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:  units
FRNCH 120  First Term French .......................... 5
FRNCH 121  Second Term French ......................... 5
FRNCH 220  Third Term French .......................... 5
FRNCH 221  Fourth Term French ......................... 5
FRNCH 230  Fifth Term French ........................... 3
FRNCH 231  Sixth Term French ........................... 3

Total units required  13-16

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

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 4, FRNCH 120+121=CAN FREN SEQ A, CSU, UC

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

FRNCH-155  First Term Conversational French
3 units  SC
- May be repeated once
- 54 hours lecture/18 hours laboratory by arrangement per term
- Note: 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 conversation of a more general nature. Emphasis will be on oral use of the language. Comprehension will be reinforced through listening 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 requirements 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 grammar. 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 220 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 literature in French with emphasis on the short story and poetry. Cultural study integrated into class discussions. Class conducted 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 language skills through student preparation and presentation of reports. This course is conducted entirely in French. CSU, UC

FRNCH-231  Sixth Term French
3 units  SC
- 54 hours lecture per term
- Recommended: FRNCH 230 or equivalent
This is a continuation of FRNCH 230 with intensive study of additional literary works. There is further development of language 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

Geography – GEOG

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; surveying; 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 accomplishment
Geographic information systems/Global positioning system
Associate in science degree - Geographic information systems/Global positioning system

The associate in science degree program in geographic information 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 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 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** ............................. 26-39

**Major requirements**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>GEOG 125</td>
<td>Introduction to Geographic Information</td>
<td>3</td>
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<td>GEOG 126</td>
<td>Advanced Geographic Information</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 127</td>
<td>Introduction to Global Positioning</td>
<td>3</td>
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<tr>
<td>GEOG 128</td>
<td>Advanced Global Positioning</td>
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<tr>
<td>GEOG 160</td>
<td>Remote Sensing</td>
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<td>GEOG 162</td>
<td>Maps and Cartography</td>
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**Plus at least 6 units from:**

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<td>COMSC 100</td>
<td>Introduction to Computer and Information Systems</td>
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<td>COMSC 100L</td>
<td>Introduction to Computer Software</td>
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<td>COMSC 110</td>
<td>Introduction to Programming</td>
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<td>COMSC 138</td>
<td>Using Visual Basic for Applications</td>
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<tr>
<td>COMSC 172</td>
<td>UNIX and Linux Installation and Local Administration</td>
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<tr>
<td>COMSC 245</td>
<td>Programming with Visual Basic.NET</td>
<td>4</td>
</tr>
<tr>
<td>COMSC 255</td>
<td>Programming with Java</td>
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**Plus at least 6 units from:**

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<tr>
<td>ANTHR 126</td>
<td>Introduction to Archeological Field</td>
<td>3</td>
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<td>BIOSC 126</td>
<td>Nature Study and Conservation</td>
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<td>BIOSC 170</td>
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<td>BUSMK 148</td>
<td>Retailing and Merchandising</td>
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<td>COOP 170</td>
<td>Occupational Work Experience</td>
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<tr>
<td>ENGIN 126</td>
<td>Computer Aided Design and Drafting - AutoCAD</td>
<td>4</td>
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<td>GEOG 120</td>
<td>Introduction to Physical Geography</td>
<td>3</td>
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<td>GEOL 120</td>
<td>Introduction to Physical Geology</td>
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**Total units for the major** 31

**Electives**

units from a selection of degree applicable courses ................... 0-2

**Total units for the degree** 60
Certificate of accomplishment - 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 accomplishment, 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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<th>Units</th>
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<td>GEOG 125</td>
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<tr>
<td>GEOG 126</td>
<td>Advanced Geographic Information Systems (GIS)</td>
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<tr>
<td>GEOG 127</td>
<td>Introduction to Global Positioning Systems (GPS)</td>
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<tr>
<td>GEOG 128</td>
<td>Advanced Global Positioning Systems (GPS)</td>
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<td>Nature Study and Conservation</td>
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<td>BUSMK 148</td>
<td>Retailing and Merchandising</td>
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<tr>
<td>COMSC 100L</td>
<td>Introduction to Computer Software</td>
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<tr>
<td>ENGIN 126</td>
<td>Computer Aided Design and Drafting - AutoCAD</td>
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<td>GEOG 120</td>
<td>Physical Geography</td>
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<td>GEOG 121</td>
<td>Physical Geography Lab</td>
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<td>GEOG 162</td>
<td>Maps and Cartography</td>
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<tr>
<td>GEOL 120</td>
<td>Physical Geology</td>
<td>3</td>
<td></td>
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<tr>
<td>GEOL 122</td>
<td>Physical Geology Lab</td>
<td>1</td>
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</tbody>
</table>

Total units required: 15

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 for a course in general or physical geology. The materials of the Earth, internal structure and dynamic processes will be covered. CSU, UC

GEOG-125 Introduction to Geographic Information Systems (GIS)

- 3 units SC
- 54 hours lecture/18 hours laboratory per term
- Recommended: COMSC 100L 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 SC
- 54 hours lecture/18 hours laboratory per term
- Prerequisite: GEOG 125 or equivalent

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 SC
- 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 SC
- 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-135  World Regional Geography**
3 units  SC
- 54 hours lecture per term
A geographic perspective of physical, cultural, political and economic characteristics of countries and regions of the world. A general survey of world place locations, and influence of geographic factors on international cooperation and conflicts. Survey of the transformation of the cultural landscape of the United States. 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 Lab**
1 unit  SC
- 54 hours laboratory per term
- Co-requisite: GEOG 140 or equivalent (may be taken previously)
- 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

**GEOG-160  Introduction to Remote Sensing**
4 units  SC
- 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 imageries and radar imageries. 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  SC
- 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

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**Geology – GEOL**

Physical Sciences and Engineering Division
Dennis Smith, Dean
Physical Science Building 261
925-685-1230 x 2359

**Possible career opportunities**
Geologists work in exploration for oil, natural gas, coal and uranium for energy, and for metals used in everyday life. They search for clean sources of groundwater for drinking and agriculture (hydrology). They seek to understand geologic hazards and how to mitigate them (seismology, flood and landslide control, and volcanology). They work to monitor and clean up pollutants in soil, groundwater and surface water. Currently, the best employment opportunities are in hydrology and pollution control. Many career options may require more than two years of college study.
GEOL-120  Physical Geology
3 units  LR
• 54 hours lecture per term
• Recommended: eligibility for ENGL 122 or equivalent
A general course in geologic science which attempts to encompass nearly all phases of geology. The course is designed to give the student a greater appreciation and deeper understanding of the fundamental processes which have changed and are presently changing the Earth's crust. The recognition of common minerals, rocks and landscape features of the Earth will be included. Practice in quantitative reasoning and development of mathematical concepts is provided. CAN GEOL 6. GEOL 120+122=CAN GEOL 2, CSU, UC

GEOL-121  Earth and Life Through Time
3 units  LR
• 54 hours lecture per term
• Recommended: GEOL 120 or equivalent and GEOL 122 or equivalent
The history of the Earth from its beginning to the present. Topics included are the origin of the Earth, the development of plant and animal life and the physical changes in the Earth which have led to the features which are observed today. CAN GEOL 8. GEOL 121+124=CAN GEOL 4, CSU, UC

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 for 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

German – GRMAN
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.

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.

Certificate of accomplishment - 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 accomplishment, students must complete each course used to meet a certificate with a “C” grade or better.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>GRMAN 120</td>
<td>First Term German</td>
<td>5</td>
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<tr>
<td>GRMAN 121</td>
<td>Second Term German</td>
<td>5</td>
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<tr>
<td>GRMAN 220</td>
<td>Third Term German</td>
<td>5</td>
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<tr>
<td>GRMAN 221</td>
<td>Fourth Term German</td>
<td>5</td>
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<tr>
<td>GRMAN 230</td>
<td>Fifth Term German</td>
<td>3</td>
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<tr>
<td>GRMAN 231</td>
<td>Sixth Term German</td>
<td>3</td>
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Total units required 13-16
Certificate of accomplishment - German

complete 13-16 units from the following list of courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>GRMAN 145</td>
<td>First Trimester German</td>
<td>3</td>
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<tr>
<td>GRMAN 146</td>
<td>Second Trimester German</td>
<td>3</td>
</tr>
<tr>
<td>GRMAN 147</td>
<td>Third Trimester German</td>
<td>3</td>
</tr>
<tr>
<td>GRMAN 220</td>
<td>Third Term German</td>
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<tr>
<td>GRMAN 221</td>
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<tr>
<td>GRMAN 231</td>
<td>Sixth Term German</td>
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Total units required 13-16

GRMAN-120 First Term German
5 units SC
• 90 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.
Beginning German. Students learn basic communication skills, vocabulary, idioms, and grammatical structures. A new and exciting video program augments the course and provides cultural background for the German-speaking countries. Audio tapes further expose the student to everyday spoken German and provide an opportunity to practice the language. CAN GERM 2, GRMAN 120+121=CAN GERM SEQ A, CSU, UC (credit limits may apply to UC - see counselor)

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 modals 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 230 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

Gerontology – GERON

San Ramon Campus Division Dean
925-866-1822 x 5103

Possible career opportunities

Gerontology provides an interdisciplinary approach to studying the human aging process and the challenges encountered by older adults and their families as they interact in society.

Career opportunities are available in both the private and public sectors. Students who have studied gerontology often work as counselors, advocates, social workers, nurses, and in areas such as recreation, and home health services. Most career options require more than two years of college study.

Specific careers include: counselor, adult protective services case worker/manager, guardian/conservator, information/referral specialist, legal aid assistant, ombudsman/advocate, program activities assistant, geriatric social worker, geriatric clinical nurse, and senior adult day care provider.

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
Diane Smith, Interim Dean
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 on methods of improving total health. The course introduces students to the concepts and skills of locating, evaluating, synthesizing, and communicating information in various formats. CSU, UC (credit limits may apply to UC - see counselor).

HSCI-125 Consumer Health
3 units SC
- 54 hours lecture per term
- Recommended: ENGL 116/118 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: ENGL 116/118 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: ENGL 116/118 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 (credit limits may apply to UC - see counselor).

HSCI-128 Medical Terminology
3 units SC
- 54 hours lecture per term
- Recommended: eligibility for ENGL 122 or equivalent
- Formerly BUSIM 231

Medical Terminology will prepare students to work in the health care field. This course teaches construction, pronunciation, spelling, definition and common usage for all medical terms in anatomy, physiology, pathology and health care. This course includes an overview of body systems, pharmacology, diagnostic procedures and clinical test protocols. CSU

HSCI-131 Cardiopulmonary Resuscitation (CPR)
.5 unit SC
- May be repeated once
- 9 hours lecture/3 hours laboratory per term
- Recommended: ENGL 116/118 or equivalent

This course is designed to teach lifesaving skills to be used in respiratory and cardiac emergencies and to recertify those with CPR already. 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
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 (CEUs) 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 (CEUs) 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 6, 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

HISTORY – HIST

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

Possible career opportunities
The study of history contributes to a cultural literacy and develops critical thinking and other useful skills for a broad range of careers including education, public services, 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
- Recommended: 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
- Recommended: 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 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

**Description:** 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
  - **Recommended:** eligibility for ENGL 122 or equivalent

**Description:** The 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
  - **Recommended:** eligibility for ENGL 122 or equivalent

**Description:** 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
  - **Recommended:** eligibility for ENGL 122 or equivalent

**Description:** This course is a survey of the movement 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 US to 1865
- **3 units**
- **SC**
  - 54 hours lecture per term
  - **Recommended:** eligibility for ENGL 122 or equivalent

**Description:** This course is a survey of the United States from the perspective of African Americans, comparing the African American 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 US after 1865
- **3 units**
- **SC**
  - 54 hours lecture per term
  - **Recommended:** eligibility for ENGL 122 or equivalent

**Description:** 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

**Description:** 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, UC

### 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

**Description:** 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  P/NP
• 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 or equivalent

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 or equivalent

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. The history of Korea and Vietnam will also be considered. 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

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

Horticulture – HORT

Biological and Health Science Division
Diane Smith, Interim Dean
Science Center Building 102
925-685-1230 x 2442

Possible career opportunities
The horticulture program prepares students for numerous state licenses and industry certifications. 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, 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 Nurseryperson’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.

required courses units
HORT 110 Introduction to Horticulture......................... 4
HORT 141 Tree Identification................................. 3
HORT 143 Shrub Identification............................... 3
HORT 145 Groundcovers and Vines Identification......... 3
HORT 147 Annuals and Perennials Identification......... 3
HORT 161 Plant Pests and Diseases ......................... 3
HORT 164 Soil Science and Management..................... 3
HORT 179 Arboriculture........................................ 3

plus at least 3 units from:
HORT 140 Basic Plant Taxonomy............................ 3
HORT 160 Plant Propagation.................................. 3
HORT 164L Soil Science Laboratory........................ 1
HORT 298 Independent Study................................. 0.5-3

Total units required 28
Certificate of achievement - Landscape construction

This program prepares students to enter the landscape construction industry. Students are prepared to take the California C-27 Landscape Contracting examination. Elements of the program will assist students to prepare for the California Landscape Contractors Association's CLT 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.

**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 Nurseryperson'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.
HORT-090NC  Adaptive Horticulture - Basic Skills and Practices
0 unit  SC
- May be repeated once
- Non degree applicable
- 108 hours laboratory per term
- Note: this is a non-credit open entry/open exit course
A horticultural and vocational training class adapted for students with special needs. Students will learn basic horticultural skills in a garden, nursery and landscape setting.

HORT-091NC  Adaptive Horticulture - Nursery Skills and Practices
0 unit
- May be repeated once
- Non degree applicable
- 108 hours laboratory per term
- Note: this is a non-credit open entry/open exit course.
A horticultural and vocational training class adapted for students with special needs. This class will focus on nursery and plant propagation skills. Students will work in the Adaptive Horticulture Nursery and they will learn pre-vocational and vocational training skills associated with nursery production and nursery management.

HORT-092NC  Adaptive Horticulture - Landscape Skills and Practices
0 unit
- May be repeated once
- Non 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 pre-vocational 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 unit  SC
- May be repeated three times
- 9 hours lecture/27 hours laboratory per term
- Recommended: eligibility for ENGL 122 or equivalent
Course offers students an opportunity to examine and try different methods and tools for managing pests in the urban environment with special emphasis on preparation and continuing education for the California Pest Control Operator’s License (PCO) and Pest Control Advisors License (POA), 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 artificial 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 lecture per term
- Recommended: HORT 110 or equivalent
- Note: this course satisfies 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 arboretum. 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 satisfies 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 natures 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
- 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 arboretum and parks. Introduction and identification of shrubs species less commonly seen in Mediterranean climate setting. 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 arboretum. CSU

HORT-148  California Native Plants
1 unit  SC
- May be repeated three times
- 54 hours laboratory per term
- Recommended: HORT 110 or equivalent
- 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  
3-4 units SC  
• May be repeated three times  
• Variable hours  
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 (PHC) 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

HORT-164  Soil Science and Management  
3 units SC  
• 54 hours lecture per term  
• Recommended: HORT 110; eligibility for ENGL 122 or equivalent  
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

HORT-164L  Soil Science Laboratory  
1 unit SC  
• 54 hours laboratory per term  
• Recommended: HORT 110 (should be taken concurrently with HORT 164); eligibility for ENGL 122  
Field trips, demonstrations, and experiments designed to strengthen understanding of topics presented in HORT 164. CSU

HORT-165  New Plant Introductions  
3 units SC  
• 54 hours lecture per term  
• Recommended: HORT 109 or 110; eligibility for ENGL 122  
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 process. 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
HORT-166  Fall Plant Production
1 unit  SC
- May be repeated once
- 54 hours laboratory per term
- Recommended: eligibility for ENGL 122 or equivalent, HORT 160 or equivalent

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

HORT-167  Spring Plant Production
1 unit  SC
- May be repeated once
- 54 hours laboratory per term
- Recommended: eligibility for ENGL 122 or equivalent, HORT 160 or equivalent

A course on the principles and practices of container production. This course is designed to help students learn greenhouse management, the scheduling of spring and summer plant production and the marketing of spring and summer grown containerized nursery stock. CSU

HORT-170  Landscape Drafting
3 units  SC
- 54 hours lecture per term
- Recommended: HORT 110 or equivalent; eligibility for ENGL 122 or equivalent

A fundamental drafting course to acquaint the landscape design student with the tools, techniques and skills needed to develop aesthetically pleasing and functional plans and construction documents for a landscape project. CSU

HORT-171  Landscape Construction
3 units  SC
- 36 hours lecture/54 hours laboratory per term
- Recommended: eligibility for ENGL 122 or equivalent

Landscape Construction is intended to prepare the student with the skills and tools required to implement typical landscape hardscape features used in the landscape industry. The class will emphasize the practical application of these skills and tools. This course helps prepare for the C-27 landscape contracting license. CSU

HORT-174  Landscape Design
3 units  SC
- 54 hours lecture per term
- Recommended: HORT 170 or equivalent; eligibility for ENGL 122 or equivalent

This class will provide the landscape design student with the tools and techniques to prepare professional landscape plans and construction documents for a variety of landscape designs; industrial, commercial, public works and residential. The design process, design principles, design theory and presentation graphics will be introduced. This class will explore the techniques needed to move a design from site analysis to preliminary design to presentation and construction documents. CSU, UC

HORT-177  Landscape Irrigation Installation
3 units  SC
- 36 hours lecture/54 hours laboratory per term
- Recommended: eligibility for ENGL 122 or equivalent

Course is designed for landscape professionals to successfully plan, assemble components and install a landscape irrigation system to provide adequate irrigation of a landscape site. The course helps prepare for the C-27 landscape contracting license. CSU

HORT-179  Arboriculture
3 units  SC
- 54 hours lecture per term
- Recommended: HORT 110 and HORT 141 or equivalent 141; eligibility for ENGL 122 or equivalent
- Note: this course satisfies the continuing education requirement for the International Society of Arboriculture and the California Association of Nurserymen.

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

HORT-179L  Arboriculture Laboratory
1 unit  SC
- 54 hours laboratory per term
- Recommended: HORT 141 and 179 (may be taken concurrently with HORT 179L); eligibility for ENGL 122

Course follows study guide prepared by National Arborist Association and the International Society of Arboriculture. 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

Humanities – HUMAN

Applied and Fine Arts
Michael Almaguer, Interim Dean
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 The 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 Latina 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/Transcaucasia. 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

Industrial technology – INTEC

Physical Sciences and Engineering Division
Dennis Smith, Dean
Physical Sciences Building 261
925-685-1230 x 2359

INTEC-120 Machining and Manufacturing I
4 units SC
- 54 hours lecture/54 hour laboratory per term
This course is an introduction to the practical and theoretical aspects of manufacturing parts from metal, plastics and other engineering materials. Students are instructed in the proper and safe use of hand tools, basic technical drawing and drawing interpretation, measuring principles and precision measuring instrument use and layout and introductory inspection techniques. Instruction will include the set up and operation of metal cutting saws, drill presses, pedestal grinders and an introduction to the engine lathe and vertical milling machine. CSU

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.

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 accomplishment - 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 accomplishment, 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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL 120</td>
<td>5</td>
<td>First Term Italian</td>
</tr>
<tr>
<td>ITAL 121</td>
<td>5</td>
<td>Second Term Italian</td>
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<tr>
<td>ITAL 220</td>
<td>5</td>
<td>Third Term Italian</td>
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<td>ITAL 221</td>
<td>5</td>
<td>Fourth Term Italian</td>
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<tr>
<td>ITAL 230</td>
<td>3</td>
<td>Fifth Term Italian</td>
</tr>
<tr>
<td>ITAL 231</td>
<td>3</td>
<td>Sixth Term Italian</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 continuation 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 146 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 156 or equivalent  
- Note: course does not satisfy the academic requirements of the ITAL 120-121 series.  
This course continues 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 121 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  

ITAL-221  Fourth Term Italian  
5 units  SC  
- 90 hours lecture/18 hours laboratory by arrangement per term  
- Recommended: ITAL 220 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 subjective are covered. CAN ITAL 10, ITAL 220+221=CAN ITAL SEQ B, CSU, UC  

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 accomplishment - 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 accomplishment, 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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAPAN 120 First Term Japanese</td>
<td>5</td>
</tr>
<tr>
<td>JAPAN 121 Second Term Japanese</td>
<td>5</td>
</tr>
<tr>
<td>JAPAN 220 Third Term Japanese</td>
<td>5</td>
</tr>
<tr>
<td>JAPAN 221 Fourth Term Japanese</td>
<td>5</td>
</tr>
</tbody>
</table>

Total units required 15

Certificate of accomplishment - Japanese
complete 13-16 units from the following list of courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAPAN 145 First Trimester Japanese</td>
<td>3</td>
</tr>
<tr>
<td>JAPAN 146 Second Trimester Japanese</td>
<td>3</td>
</tr>
<tr>
<td>JAPAN 147 Third Trimester Japanese</td>
<td>3</td>
</tr>
<tr>
<td>JAPAN 220 Third Term Japanese</td>
<td>5</td>
</tr>
<tr>
<td>JAPAN 221 Fourth Term Japanese</td>
<td>5</td>
</tr>
<tr>
<td>JAPAN 245 Intermediate Japanese</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units required 13-16

JAPAN-120 First Term Japanese
5 units SC
- 90 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, 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=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 the 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=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

JAPAN-298  Independent Study
.5-.3 units  SC
• May be repeated three times
• Variable hours
• Note: 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 faculty. CSU
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 or equivalent
This course introduces students to the major mass media and their impact on American life. Students explore their history, how they are structured, who controls them and how they influence individual and social values. Topics include First Amendment rights and responsibilities, techniques of persuasion and propaganda, the blurred line between entertainment and news, the role of journalists in war time, issues of credibility and trust and the impact of the "new media" - digital technology and the Internet - on the traditional forms of mass communication. The course emphasizes critical thinking and analysis of the images and sounds that so powerfully shape the public mind. CAN JOUR 4, CSU, UC

JRNAL-120 Basic Newspaper Techniques
3 units SC
• 54 hours lecture per term
• Recommended: ENGL 118
This course introduces students to journalism reporting and writing, including generating story ideas, developing sources, conducting interviews, doing online research, taking accurate notes, observing detail and exercising news judgment. The course also covers sensitivity to multicultural issues and explores libel laws and media ethics. Students will learn how to write strong lead sentences, how to organize their findings into lively and informative stories, and how to write and revise their work on deadline. 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 laboratory course introduces students to real world experience as editors and staff members of The Inquirer, a student-run newspaper that is often recognized for General Excellence by the Journalism Association of Community Colleges. Students are responsible for all aspects of production, including assigning, researching and writing stories; taking photographs; cartooning; soliciting advertisements; designing pages on networked terminals; and working with a local printer. Staff writers learn basic and advanced reporting techniques, as well as how to write strong leads, organize their stories and write and revise on deadline. Photographers and graphic artists learn digital darkroom skills. Editors and staff members must exercise news judgment, adhere to the highest ethical principles and be vigilant about accuracy. They also exercise their First Amendment responsibilities by allowing The Inquirer’s opinion pages to serve as a community forum for the diverse views of the DVC community. This is an open entry/open exit course. CSU

JRNAL-160 Writing the Feature Story
3 units SC
• 54 hours lecture per term
• Recommended: ENGL 118
• Formerly JRNAL 150
This course introduces students to the research, writing and marketing skills needed to write feature stories for newspapers, magazines and the Internet. Topics include interviewing and storytelling strategies; the writing process, including how to conquer writer’s block; finding your voice; focusing a story; self-editing techniques; writing effective query letters; and using the Internet as a tool and potential publishing medium. Students are encouraged to set their own goals, be it to explore new types of writing, produce stories for the student newspaper or break into the publishing world. 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.
An opportunity for advanced students to study special interests under the direction of the 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.

Applied and Fine Arts
Michael Almaguer, Interim Dean
Humanities Building 112 and 113
925-685-1230 x 2312

LATIN-120 First Term Latin
5 units  SC
• 90 hours lecture per term
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: LATIN 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

LRNSK-049 Learning Skills Eligibility Assessment
.5 unit  P/NP
• Non degree applicable
• 6 hours lecture/9 hours laboratory by arrangement per term
• Note: for more information, see Disability Support Services Counselor.
A course designed to provide assessment for learning disability services eligibility, as well as instruction in study skill strategies, and academic accommodations. Through group and individual testing and in-class exercises, a profile of student’s learning strengths, weaknesses, and learning style will be developed.

LRNSK-053 Computer-Assisted Writing Strategies
3 units  SC
• May be repeated three times
• Non 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 two times
• Non 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
.5-1 unit  P/NP
• May be repeated three times
• Non degree applicable
• Variable hours
• 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 are required.
Course provides individualized and small group instruction in computer access strategies for learning disabled, physically disabled, visually impaired, as well as other students with disabilities. This process will be facilitated by speech synthesizers, screen magnification, speech recognition programs and adaptive keyboarding strategies as appropriate.
LRNSK-057 Augmented Word Processing
3 units SC
- May be repeated three times
- Non 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
- Non 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 P/NP
- May be repeated once
- 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 summer 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 during 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.

major requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>L 100</td>
<td>Introduction to a Career in Library and Information Technology</td>
<td>3</td>
</tr>
<tr>
<td>L 103</td>
<td>Access to Library Materials</td>
<td>2</td>
</tr>
<tr>
<td>L 104</td>
<td>Cataloging for Paraprofessionals</td>
<td>2</td>
</tr>
<tr>
<td>L 105</td>
<td>Reference and Research Services: Tools and Techniques</td>
<td>1.5</td>
</tr>
<tr>
<td>L 108</td>
<td>Acquisition of Library Materials</td>
<td>3</td>
</tr>
<tr>
<td>LS 121</td>
<td>Information Literacy and Research Skills</td>
<td>1</td>
</tr>
</tbody>
</table>

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 109 Delivering Library Services: Issues, Theory and Techniques | 2 |
- L 111 Storytelling | 2 |
- L 112 Internet Skills for Library Personnel | 1 |
- L 114 Developing Web Pages for Library Information | 2 |
- L 150 Topics in Library and Information Technology | 1.5 |
- LS 130 Internet and Online Research | 1 |
- LS 150 Topics in Library Studies | 1.5 |

plus at least 0-6 units from:

- ARTDM 100 Introduction to Multimedia Workstations | 1 |
- ARTDM 110 Digital Imaging Process and Technique I | 1.5 |
- ARTDM 171 Web Design | 3 |
- BUSMG 121 Practices and Concepts of Supervision | 3 |
- COMSC 100 Introduction to Computers and Information Systems | 3 |

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 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 during the day. Other electives and course substitutions not listed below are possible with department chairperson approval.

major requirements

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<tr>
<th>Code</th>
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<tr>
<td>L 108</td>
<td>Acquisition of Library Materials</td>
<td>1</td>
</tr>
<tr>
<td>LS 121</td>
<td>Information Literacy and Research Skills</td>
<td>1</td>
</tr>
</tbody>
</table>

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 109 Delivering Library Services: Issues, Theory and Techniques | 2 |
- L 111 Storytelling | 2 |
- L 112 Internet Skills for Library Personnel | 1 |
- L 114 Developing Web Pages for Library Information | 2 |
- L 150 Topics in Library and Information Technology | 1.5 |
- LS 130 Internet and Online Research | 1 |
- LS 150 Topics in Library Studies | 1.5 |

plus at least 0-6 units from:

- ARTDM 100 Introduction to Multimedia Workstations | 1 |
- ARTDM 110 Digital Imaging Process and Technique I | 1.5 |
- ARTDM 171 Web Design | 3 |
- BUSMG 121 Practices and Concepts of Supervision | 3 |
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 online 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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<tr>
<td>L 100</td>
<td>Introduction to a Career in Library and Information Technology</td>
<td>1</td>
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</tr>
<tr>
<td>L 106</td>
<td>Acquisition of Library Materials</td>
<td>1</td>
<td></td>
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<tr>
<td>L 107</td>
<td>Delivering Library Services: Issues, Theory, and Techniques</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L 108</td>
<td>Job Search Skills for Library Careers</td>
<td>1</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Library studies**

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 Experience Education ............. 1-4

**Total units required** 19

L-104 Cataloging for Paraprofessionals

- 3 units SC
- 54 hours lecture per term
- **Recommended:** eligibility for ENGL 122 or equivalent

An introductory course for library paraprofessionals on the basic theories, principles, concepts and procedures of bibliographic control, including descriptive cataloging, classification, subject analysis, physical processing, and bibliographic maintenance. Emphasis will be placed on print monographs, current Anglo-American Cataloging Rules, MARC 21 format, Library of Congress and Dewey classification and LC Subject Heading. 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-106 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-107 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-110 Job Search Skills for Library Careers

- 1 unit SC
- 18 hours lecture per term
- **Recommended:** eligibility for ENGL 122 or equivalent

This course will prepare students for a successful job search in a library field. Utilizing traditional and electronic methods, students will explore the range of positions and work environments available; use sources of information for job market research; identify key workplace skills, learn best practices for writing applications, resumes, and cover letters; and practice interviewing techniques. 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: 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 Web Pages for Library Information
2 units P/NP
- 36 hours lecture per term
- Recommended: eligibility for ENGL 122 or equivalent
This course teaches students how to create, manage and maintain Web pages. Emphasis is placed on organization, presentation, and maintenance of Web pages and sites for library applications. 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-120 Introduction to Library Resources
1 unit P/NP
- 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 of the Diablo Valley College library and other libraries. CSU, UC

LS-121 Information Literacy and Research Skills
1 unit P/NP
- 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 P/NP
- 18 hours lecture per term
- Recommended: eligibility for ENGL 122 or equivalent
An introduction to using the Internet and other online resources to locate and retrieve information for research and writing. Through lecture, demonstrations, and hands-on activities, a range of Internet services will be introduced including search and navigation tools on the open and closed Web, specialized collections, Wikis, Blogs and subscription journal databases. Evaluating information and choosing appropriate resources are practiced throughout the course. 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

LS-100 Fundamental Library and Research Skills
.5 unit P/NP
- 9 hours lecture per term
This short-term basic library and research skills course introduces students to information resources in an academic library, including online catalogs, electronic databases and the Internet. Emphasis will be placed on the organization, retrieval, and evaluation of information. The research skills learned are intended to be useful in college course work.
Machine technology – MATEC

Please check with a counselor for current program status.

Physical Sciences and Engineering Division
Dennis Smith, Dean
Physical Sciences Building 261
925-685-1230 x 2359

Certificate 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONST 114</td>
<td>Blueprint Reading</td>
<td>2</td>
</tr>
<tr>
<td>ENGIN 111</td>
<td>Mathematics for Technicians</td>
<td>4</td>
</tr>
<tr>
<td>ENGIN 119</td>
<td>Introduction to Technical Drawing</td>
<td>3</td>
</tr>
<tr>
<td>MATEC 120</td>
<td>Introduction to Machine Technology</td>
<td>4</td>
</tr>
<tr>
<td>MATEC 121</td>
<td>Machine Processes II</td>
<td>3</td>
</tr>
<tr>
<td>MATEC 220</td>
<td>Production Grinding Practices</td>
<td>3</td>
</tr>
<tr>
<td>MATEC 222</td>
<td>Introduction to Computer Numerical Control</td>
<td>3</td>
</tr>
<tr>
<td>MATH 114</td>
<td>Geometry</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 110-111</td>
<td>Elementary Physics and Laboratory</td>
<td>5</td>
</tr>
</tbody>
</table>

plus at least 3 units from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 110</td>
<td>Elementary Algebra</td>
<td>4</td>
</tr>
<tr>
<td>MATH 121</td>
<td>Plane Trigonometry</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units required 33-34

MATEC-120 Introduction to Machine Technology
4 units LR
• 54 hours lecture/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, deburring 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 turn precision diameters and cut threads on the lathe; read a micrometer; use metal cutting saws, drills, and milling machines
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 hours 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 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 instructor. CSU
Mathematics – MATH

Effective Spring 2006, the “or equivalent” used in the prerequisite and recommended statements in the math courses equates to appropriate placement through the assessment process or an equivalent college course. A mathematics laboratory is open daily in the Learning Center where mathematics advisors are available to aid students.

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 statistics, 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 business 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.

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
• Non 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 multiplication and division of whole numbers, decimals, fractions, percents, 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 Prealgebra with Arithmetic Review
4 units SC
• Non 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 online component. Students will do their homework online 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, 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-075SP Prealgebra with Arithmetic Review - Self Paced
1-4 units SC
• May be repeated three times
• Non degree applicable
• Variable hours
• Recommended: MATH 065 or equivalent
• Note: this is an open entry/open exit self-paced class, 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 online 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 class, 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 110SP must complete all 4 units in order to be eligible. 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 120SP 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 online 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 120SP 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 high 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 (credit limits may apply to UC - see counselor)  

MATH-125  Principles of Numbers  
3 units LR  
* 54 hours lecture per term  
* Prerequisite: MATH 120 or MATH 120SP or equivalent  
* Recommended: eligibility for ENGL 122 or equivalent  
* Note: this course is primarily helpful to students who plan to teach in elementary school but is open to all who have the prerequisite.  
* 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 (credit limits may apply to UC - see counselor)  

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  
This course focuses on the chronological, biographical and conceptual approaches to the history of mathematics. Students will learn about the times, historical events and people who shaped the evolution of mathematical concepts and symbolism in western civilization. The time span begins with early man up to the 18th century with selected topics from modern times. CSU, UC  

MATH-135  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 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 is a self-paced version of the MATH 135 course. Students work at their own pace to complete three one-unit segments, working on modules at their own pace and taking exams on each module. When all three segments are completed, the student has completed the equivalent of the Math 135 course. The topics include a study of functions and their graphs, including polynomial, rational, exponential, and logarithmic functions, inequalities, nonlinear systems, conic sections. CAN MATH 10, 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  
Basic principles and methods of tutoring, including the tutoring sequence, leading and probing questions, communication, skills, and learning theory. Application of tutoring techniques to specific areas of mathematics including algebra, trigonometry, and pre-calculus. Students will receive instruction in helping tutees with special needs. CSU  

MATH-142  Elementary Statistics with Probability  
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)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Type</th>
<th>Prerequisites/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH-170</td>
<td>Topics in Mathematics</td>
<td>0.3-4</td>
<td>SC</td>
<td>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.</td>
</tr>
<tr>
<td>MATH-181</td>
<td>Finite Mathematics</td>
<td>3</td>
<td>LR</td>
<td>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, Markov chains, game theory, and finance. Use of a graphing calculator or computer software to manipulate matrices. CAN MATH 12, CSU, UC.</td>
</tr>
<tr>
<td>MATH-182</td>
<td>Calculus for Management, Life Science and Social Science I</td>
<td>3</td>
<td>LR</td>
<td>72 hours lecture per term. Prerequisite: MATH 135 or MATH 135SP or MATH 191 or equivalent. Note: not open to students who received credit for MATH 192 or equivalent. This is the first in a two-term 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).</td>
</tr>
<tr>
<td>MATH-183</td>
<td>Calculus for Management, Life Science and Social Science II</td>
<td>3</td>
<td>LR</td>
<td>54 hours lecture per term. Prerequisite: MATH 182 or equivalent. Recommended: MATH 121 or equivalent. This is the second course in a two-term sequence in calculus 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 32, MATH 182+183=CAN MATH SEQ D, CSU, UC (credit limits may apply to UC - see counselor).</td>
</tr>
<tr>
<td>MATH-191</td>
<td>Pre-Calculus</td>
<td>4</td>
<td>LR</td>
<td>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. Conic sections, nonlinear systems, vectors and complex numbers. Use of a graphing calculator or a computer algebra system. CAN MATH 15; CSU, UC (credit limits may apply to UC - see counselor).</td>
</tr>
<tr>
<td>MATH-192</td>
<td>Analytic Geometry and Calculus I</td>
<td>4</td>
<td>LR</td>
<td>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).</td>
</tr>
<tr>
<td>MATH-193</td>
<td>Analytic Geometry and Calculus II</td>
<td>4</td>
<td>LR</td>
<td>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).</td>
</tr>
<tr>
<td>MATH-194</td>
<td>Linear Algebra</td>
<td>3</td>
<td>LR</td>
<td>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</td>
</tr>
</tbody>
</table>
MATH-195  Discrete Mathematics
4 units  LR
- 72 hours lecture per term
- Prerequisite: MATH 193 or equivalent (MATH 193 may be taken concurrently)
- 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
This class covers the further study of limits, parametric equations, vector-valued functions, analytic geometry of three dimensions, partial derivatives, multiple integrals, and Green’s, Stokes’ and the Divergence theorems. CAN MATH 22; MATH 192+193+292=CAN MATH 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

MATH-298  Independent Study
.5-3 units  SC
- May be repeated three times
- Variable hours
- Prerequisite: submission of acceptable educational contract to department and instruction offices; topics must extend study beyond current course offerings
An opportunity for advanced students or students with special interests to study selected topics under the direction of the faculty. CSU

Music – MUSIC
Applied and Fine Arts Division
Michael Almaguer, Interim Dean
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, transmitter, 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 accomplishment
Music industry studies - Recording arts

Certificate of accomplishment - 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 accomplishment, 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  units
MUSIC 124  Introduction to Music Production and Multi-track Recording.................................3
MUSIC 172  Introduction to Electronic Music and MIDI........3
MUSIC 174  Introduction to ProTools.........................3
MUSIC 181  Introduction to the Music Industry...........2

plus at least 6 units from:
MUSIC 125  Advanced Music Production and Multi-track Recording....................................3
MUSIC 173  Advanced Electronic Music.......................3
MUSIC 175  Applied ProTools.................................3
MUSIC 177  Introduction to Reason and ACID.............3
MUSIC 182  Songwriting.........................................3
MUSIC 270  Applied Projects in Music Industry Studies...3

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
- Recommended: eligibility for ENGL 122 or equivalent
- Note: students should be concurrently enrolled in a major performance ensemble (choir, band, orchestra, jazz ensembles, piano ensemble) and in a theory and musicianship class (MUSIC 122, 123, 222, or 223) in order to meet transfer requirements.

This course is for intensive private study of an instrument or voice. Students meet individually with a private teacher for a total of six hours per semester, practice in department practice rooms for at least four hours per week, and meet once a week to perform for each other. Three such performances are required per semester along with a juried performance at the end of the semester. This course is open entry/open exit. CSU, UC

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, transposition 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 study 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  Blues, Rock, and R & B Performance
1 unit  SC
- May be repeated three times
- 54 hours lecture per term

This is a course in the theory and performance of Blues, Rock & Roll and Rhythm & Blues. Instrumentalists (guitar, bass, drums, horns and piano) and vocalists form small ensembles to examine, rehearse, and perform music from these contemporary American musical styles. Clinics by guest artists and industry experts will be included. New music is performed each semester. CSU, UC

MUSIC-106  Country, Funk, and Soul Performance
1 unit  SC
- May be repeated three times
- 54 hours lecture per term

This is a course in the theory and performance of Country, Funk, and Soul. Advanced instrumentalists (guitar, bass, drums, horns and piano) and vocalists form small ensembles to examine, rehearse, and perform music from these contemporary American musical styles. Clinics by guest artists and industry experts will be included. New music is studied each semester. CSU, UC

MUSIC-120  Introduction to Music Skills
3 units  SC
- 54 hours laboratory per term
- Recommended: eligibility for ENGL 122 or equivalent

This course is for the study of the fundamentals of music. Discussions, assignments and activities will focus on music reading, ear training, sight singing, keyboard knowledge, key and time signatures, intervals, scales and chords using standard Western notation, with historical, social and aesthetic contexts. This course is designed for the general 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
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. This course will explore, analyze and evaluate contemporary music production techniques and 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 multitrack 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 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
• May be repeated once
• 54 hours lecture per term
• Note: student is limited to a maximum of 4 units in any combination of MUSIC 150 and 151.
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
• May be repeated once
• 54 hours lecture per term
• Recommended: MUSIC 150 or equivalent
• Note: student is limited to a maximum of 4 units in any combination of MUSIC 150 and 151.
Group instruction in piano for the student who has had Beginning Piano I or its equivalent. Students will learn to play ensemble and solo works beyond the five-finger position. Classical and popular music will be emphasized. The course is designed for both music majors planning to transfer as well as those studying primarily for personal enjoyment. CSU, UC

MUSIC-152 Jazz Piano
1 unit SC
• May be repeated three times
• 54 hours lecture per term
• Recommended: MUSIC 151 or equivalent
This course is for the study of the theory and practice of jazz piano through learning chords, voicings, improvisational techniques, and various styles of the jazz idiom. CSU, UC

MUSIC-154 Beginning Woodwind Instruments
1 unit SC
• May be repeated three times
• 54 hours laboratory per term
• Note: course may be repeated when learning a different woodwind instrument.
This course provides beginning flute, clarinet, oboe, saxophone and bassoon instruction for general students as well as music students seeking to learn a second instrument. The course includes fundamentals of tone production, articulation, and basic instrumental technique. CSU, UC
MUSIC-155  Beginning Brass Instruments
1 unit  SC
- May be repeated three times
- 54 hours laboratory per term
- Note: course may be repeated when learning a different brass instrument.
This course provides beginning trumpet, horn, trombone, euphonium (baritone) and tuba instruction for general students as well as music students seeking to learn a second instrument. The course includes fundamentals of tone production, articulation and basic instrumental technique. CSU, UC

MUSIC-156  Beginning String Instruments
1 unit  SC
- May be repeated three times
- 54 hours laboratory per term
- Note: course may be repeated when learning a different string instrument.
This course provides beginning violin, viola, cello, and double bass instruction for general students as well as music students seeking to learn a second instrument. The course includes fundamentals of bowing, ear training and basic instrumental technique. CSU, UC

MUSIC-157  Beginning Percussion Instruments
1 unit  SC
- May be repeated two times
- 54 hours laboratory per term
- Note: course may be repeated when learning a different percussion instrument.
This course provides beginning snare drum, keyboard mallet and timpani instruction for general students as well as music students seeking to learn a second instrument. The course includes fundamentals of drum rudiments, ear training and basic instrumental technique. 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
This is an introductory course that provides the foundational skills necessary for the creation of electronic music on a Digital Audio Workstation capable of utilizing MIDI (Musical Instrument Digital Interface). Students will gain direct hands-on experience with MIDI-capable synthesizers, tone generators and samplers, digital signal processors, and computer-based music sequencing software. CSU

MUSIC-173  Advanced Electronic Music
3 units  SC
- May be repeated once
- 36 hours lecture/54 hours laboratory per term
- Recommended: MUSIC 172 or equivalent
This advanced course builds upon the knowledge and technical skills developed in MUSIC 172: Introduction to Electronic Music and MIDI. Students will learn to integrate the MIDI and digital audio recording environments and also develop the advanced post production skills needed for employment in the music recording industry. Topics will include digital audio recording and editing, effects processing, mixing, and digital audio file management and conversion, sampling, synthesis, and advanced MIDI sequencing. 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 uses 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 two times  
- 54 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  
3 units  SC  
- 36 hours lecture per term  
- Recommended: eligibility for ENGL 122 or equivalent  
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, the effects of new technology on the industry, 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 rights 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 harmonic technique, 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  Piano Technique and Interpretation  
1 unit  SC  
- May be repeated three times  
- 54 hours laboratory per term  
- Recommended: MUSIC 151 or equivalent  
This course provides comprehensive instruction, including the piano with an emphasis on developing technical and interpretive skills essential for proper playing of music from classical and popular repertoire. Methods of preparation based on an understanding of period/composer-specific performance practice is essential. The course addresses posture, freedom of motion, and technical production through physical and anatomical awareness. Essential for the serious musician and those wishing to refine technical and interpretive understanding. CSU, UC

MUSIC-252  Piano Ensemble  
3 units  SC  
- 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  Piano Repertoire and Performance  
1 unit  SC  
- May be repeated three times  
- 54 hours lecture per term  
- Prerequisite: audition  
This course is for the study and performance of keyboard works from the 18th, 19th and 20th/21st centuries in a master class format. New literature will be studied each semester. Audition required. CSU, UC

MUSIC-256  Pedagogy for Studio Music Teachers  
1 unit  SC  
- May be repeated three times  
- 54 hours lecture per term  
This class is a practical study of pedagogy, or the science and art of teaching. This course is designed for current and aspiring studio music teachers of keyboard and instrumental students. Through performance, discussion, research, and lecture/demonstration, students will explore ways to augment, develop, and review methods of teaching and performance, gaining the ability to successfully work with learning styles of diverse population through utilizing an interdisciplinary approach. CSU
MUSIC-270  Applied Projects in Music Industry Studies
3 units   SC
• May be repeated three times
• 36 hours lecture/14 hours laboratory per term
• Recommended: MUSIC 124, 172, 174, 181 or equivalent
This course is designed for students who are preparing for a career in the music industry and will emphasize the entrepreneurial skill-set needed for professional music production, marketing and distribution. Students will work on special production-oriented projects utilizing the college’s Internet radio station and record label as a laboratory. Working independently and in teams, students will practice and apply the music production tools and business skills they have developed in prior semesters of the Music Industry Studies program. Projects will vary from semester to semester. CSU

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: CSU

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-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 idea that music is a cultural artifact - that music is culture. Students will explore, evaluate, compare, and contrast the diverse musics and traditions of America. This includes the cultural contributions and influences of major ethnic groups. The course will serve as an introduction to the field of ethnomusicology. Students will examine the historical, religious, political, and social contexts for music development and experience. Students will study the relation of music to cultural continuity and/or change within both mainstream and marginalized populations. 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 (credit limits may apply to UC - see counselor)

MUSLT-114  World Music
3 units   SC
• 54 hours lecture per term
• Recommended: eligibility for ENGL 122 or equivalent
This course provides a survey of world music. Students will explore, evaluate, compare and contrast the diverse musics and traditions, focusing on the cultural contributions and influences in the Americas, Asia, the Middle East, Africa, Oceania, and Europe. Historical, cultural, philosophical and social conditions in which music exists, its relationship to cultural continuity and/or change, as well as the artistic conditions in which musics and cultures develop will be explored through three primary lenses: sound, concept, and behavior. This course serves as an introduction to the field of ethnomusicology. 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
MUSLT-116 Introduction to Native American Musics and Cultures
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

MUSLT-117 History of Rock and R & B
3 units SC
- 54 hours lecture per term
- Recommended: eligibility for ENGL 122 or equivalent
The course will examine the history of rock and roll and its musical roots. Students will learn basic music listening skills while examining the multicultural history of rock and its connection to contemporary American culture. Audio recordings, audio-visual recordings, and live performances are used to study the evolution of rock and its various musical roots, including blues, country, R and B, and folk music. CSU, UC (credit limits may apply to UC - see counselor)

MUSLT-118 History of Jazz
3 units SC
- 54 hours lecture per term
- Recommended: eligibility for ENGL 122 or equivalent
This course is for the study of the history of jazz music from traditional, ragtime, boogie-woogie, stride, swing, bebop, and cool, to various contemporary jazz, and fusion art forms. It includes a study of the forces that have shaped the art from European, African, Latin, and African-American influences. The class explores the contributions and conflicts of African-Americans throughout the history and development of this American music. CSU, UC (credit limits may apply to UC - see counselor)

MUSPF-107 Live Popular Concert Performance and Production
1 unit SC
- May be repeated three times
- 54 hours lecture per term
This course is a practical performance class in a professional venue environment. The focus of the course will be the fundamentals of integrating an American roots performance ensemble (rock, soul, funk, blues, R & B, and country), booking an act, sound systems, and business concerns into the live performance experience. CSU

MUSPF-130 Jazz Workshop
1 unit SC
- May be repeated three times
- 54 hours lecture per term
- Prerequisite: audition
This course is for the development of skills needed to play jazz. Skills addressed include intonation, rhythmic accuracy, tone, dynamic control, style specific articulation, phrasing, and expression, sight-reading, improvisation and practicing. Skills are developed in an ensemble setting. A variety of styles will be studied, including Medium Swing, Latin and Fusion. Public performance is included. New literature will be studied each semester. CSU, UC

MUSPF-134 Musical Theater Workshop
1 unit SC
- May be repeated three times
- 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
- May be repeated three times
- 54 hours laboratory per term
- Prerequisite: audition
This course is for the study, rehearsal and public performance of standard vocal jazz ensemble literature for mixed voices. New literature will be studied each semester. CSU, UC
Music performance

MUSPF-136 Jazz Ensemble
1 unit LR
- May be repeated three times
- 54 hours lecture per term
- Prerequisite: audition
This course is for the study of playing jazz both as a soloist and a member of section in a jazz ensemble. Skills addressed include section and ensemble intonation, rhythmic accuracy, tone, blend, balance, style specific articulation, phrasing, and expression, and improvisation. A variety of styles will be studied including Ballad, Shuffle and Funk. Public performance is included. New literature will be studied each semester. CSU, UC

MUSPF-137 Jazz Combos
1 unit SC
- May be repeated once
- 54 hours laboratory per term
- Prerequisite: audition or equivalent
This course is comprised 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, festivals, and private events. 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
- Prerequisite: audition
This is a performance organization whose goals include the sight-reading, rehearsal and performance of a variety of wind ensemble literature. Each member of the group will become a better musician through individual practice and performance, and being an active part of the ensemble experience. New literature will be performed each semester. CSU, UC

MUSPF-142 Woodwind Ensemble
1 unit SC
- May be repeated three times
- 54 hours laboratory per term
- Prerequisite: audition
This performance ensemble focuses on the sight-reading, rehearsal and performance of woodwind ensemble literature. Each member of the group will become a better musician through individual practice and performance, and being an active part of the ensemble experience. CSU, UC

MUSPF-144 Brass Ensemble
1 unit LR
- May be repeated three times
- 54 hours laboratory per term
- Prerequisite: audition
This performance ensemble focuses on the sight-reading, rehearsal and performance of brass ensemble literature. Each member of the group will become a better musician through individual practice and performance, and being an active part of the ensemble experience. CSU, UC

MUSPF-162 Concert Choir
1 unit SC
- May be repeated three times
- 54 hours laboratory per term
- Prerequisite: audition
This course is the study, rehearsal and public performance of standard choral literature for mixed voices. New literature will be studied each semester. 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 Percussion Ensemble
1 unit SC
- May be repeated three times
- 54 hours laboratory per term
- Prerequisite: audition
This performance ensemble focuses on the sight-reading, rehearsal and performance of percussion ensemble literature. Each member of the group will become a better musician through individual practice and performance, and being an active part of the ensemble experience. CSU, UC

MUSPF-176 String Ensemble
1 unit SC
- May be repeated three times
- 54 hours laboratory per term
- Prerequisite: audition
This performance ensemble focuses on the sight-reading, rehearsal and performance of string ensemble literature. Each member of the group will become a better musician through individual practice and performance, and being an active part of the ensemble experience. CSU, UC

MUSPF-180 Diablo Valley Masterworks Chorale
1 unit SC
- May be repeated three times
- 54 hours laboratory per term
- Prerequisite: audition
Study and performance of the major choral literature often with orchestra. New literature is studied each term. CSU, UC

MUSPF-236 Night Jazz Band
1 unit SC
- May be repeated three times
- 54 hours lecture per term
- Prerequisite: audition
This course is for the study of playing big band jazz in festival, club, and tour settings. A variety of styles will be studied, including Hip-Hop, odd-meter, and Fast Swing. The course includes working with a major guest artist. Public performance is included. New literature will be studied each semester. CSU, UC
MUSPF-240 Symphonic Band
1 unit LR
- May be repeated three times
- 54 hours laboratory per term
- Prerequisite: audition

This is a performance organization whose goals include the sight-reading, rehearsal and performance of a variety of symphonic band literature. Each member of the group will become a better musician through individual practice and performance, listening and being an active part of the ensemble experience. New literature will be studied each semester. 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
Diane Smith, Interim Dean
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. The course introduces students to the concepts and skills of locating, evaluating, synthesizing, and communicating information in various formats. 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
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, nursing and allied health. CAN FCS 2, 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

Oceanography – OCEAN

Biological and Health Sciences Division
Diane Smith, Interim Dean
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 should enroll in OCEAN 102.
- 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 statewide water resources; oceans' roles as a dominant influence of 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, aquacultural 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-102  Fundamentals of Oceanography with Lab
4 units  SC
- 54 hours lecture/54 hours laboratory per term
- Recommended: eligibility for ENGL 122 or equivalent
- Note: students who have taken Fundamentals of Oceanography OCEAN 101 (formerly OCEAN 109) will not receive credit for Fundamentals of Oceanography OCEAN 102.
- Formerly OCEAN 110
This course is an introduction to the geographical, 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 sampling and analysis methods; the scientific method and its utilization in the ocean sciences; plate tectonics and marine geology; the marine-land interface; ecological problems of the local bay, estuary, delta and statewide water resources; oceans' roles as a dominant influence on the earth and its climate; ocean resource management and preservation of the marine environment; the deep sea; properties, animal diversity and evolutionary adaptations; and evolution by means of natural selection. Students will experience the role of oceanographer as they prepare for, participate in, and analyze data collected on a research expedition in local bay waters. 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
.3-4 units SC
- May be repeated three times
- Variable hours
- 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

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.

Applied and Fine Arts Division
Michael Almoguer, Interim Dean
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 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-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
.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
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  
• 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  
• 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  
Michael Almaguer, Interim Dean  
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 5, 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

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

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

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
- 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
This course provides an opportunity for students to study special interests under direction of philosophy faculty. CSU

Photography
See Art-ART

Applied and Fine Arts Division
Michael Almaguer, Interim Dean
Humanities Building 112 and 113
925-685-1230 x 2312

Possible career opportunities
A photography career offers exciting job prospects as a photojournalist, archivist, photo engraver, photographic craftsman, photographic laboratory technician, illustrator, and commercial photographer (weddings, portraits, industrial, fashion, and architecture.)

Physical education

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

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
- 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
This course provides an opportunity for students to study special interests under direction of philosophy faculty. CSU

Photography
See Art-ART

Applied and Fine Arts Division
Michael Almaguer, Interim Dean
Humanities Building 112 and 113
925-685-1230 x 2312

Possible career opportunities
A photography career offers exciting job prospects as a photojournalist, archivist, photo engraver, photographic craftsman, photographic laboratory technician, illustrator, and commercial photographer (weddings, portraits, industrial, fashion, and architecture.)

Physical education – PE

Activity courses - 0.5-2 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.

Physical Education, Athletics and Dance Division
Diane Smith, Interim Dean
Science Center 102
925-685-1230 x 2442

PE-100  Aquatic Fitness
.5-2 units  SC
- May be repeated three times
- Variable hours
- Recommended: PE 106 or equivalent
This is an activity course designed to enable students to develop a high level of cardiovascular fitness through a swimming workout. Competitive strokes will be performed and utilized within both aerobic (long distance) and anaerobic (sprint distance) style fitness programs. Students will improve cardiovascular conditioning, upper body muscular strength and core strength. Students will also gain knowledge in fitness training principles such as periodization, overload, and recovery. CSU, UC (credit limits may apply to UC - see counselor)

PE-102  Lifeguard Training
.5-2 units  SC
- May be repeated three times
- 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

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 is an activity course designed to teach fundamental swimming skills. Emphasis will be on developing proper swimming techniques, including noncompetitive and competitive swim strokes (freestyle, backstroke, breaststroke, and butterfly). Students will also learn aquatics safety methods and the fundamentals of starts and turns. 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-108  Beginning Hatha Yoga
.5-2 units SC
• May be repeated once
• Variable hours
• Formerly PE-114
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-109  Intermediate/Advanced Hatha Yoga
.5-2 units SC
• May be repeated once
• Variable hours
• Recommended: PE 108 or equivalent
This is an activity course that emphasizes intense stretching, balancing, and building of muscular strength through yoga practice. A series of poses and breathing techniques will be practiced in order to create a more strenuous yoga experience. Proper posture, relaxation and meditation techniques, as well as principles of healthy living, will be demonstrated and discussed throughout the course. The yoga experience is non-competitive. 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-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 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-118  Triathlon Training
.5-2 units SC
• May be repeated three times
• Variable hours
This course offers students the opportunity to cross-train in triathlon skills (swimming, biking, and running) and learn training methods to accomplish a high level of fitness through triathlon training. The history, rules, equipment, and safety concerns of triathlon are provided. Training methods and race strategies are also discussed. No previous experience in triathlons is needed. 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  
Intended for students of all fitness levels, 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 is an activity course designed to improve physical fitness through participation in flexibility routines, resistance training, core strengthening, and cardiovascular exercise. Fitness training that benefits a particular sport or activity may also be considered. The benefits of physical fitness as an aspect of overall well-being will be discussed. 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, muscular endurance and agility. A series of continuous movement exercises, with an emphasis on routines, will be carried out to high-energy music. CSU, UC (credit limits may apply to UC - see counselor)

PE-122  Weight Training  
- .5-2 units SC  
  - May be repeated three times  
  - Variable hours  
This class covers the techniques and training schedules of resistive strength training of all body parts. CSU, UC (credit limits may apply to UC - see counselor)

PE-123  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-124  Super Circuit  
- .5-2 units SC  
  - May be repeated three times  
  - Variable hours  
Super Circuit is a combination of aerobics and weight training 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-125  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-126  Cardio Kickboxing  
- .5-2 units SC  
  - May be repeated three times  
  - Variable hours  
This course will combine skills and techniques from boxing, self-defense and various forms of martial arts, such as, Karate and Muay Thai to promote a fun, yet effective and challenging aerobic workout. Jump rope and running will be primary cardiovascular 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-127  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, technique, value and joy of cycling will be explored. CSU, UC (credit limits may apply to UC - see counselor)

PE-128  Hiking  
- .5-2 units SC  
  - May be repeated three times  
  - Variable hours  
  - Note: students are advised to seek permission from their doctor before beginning course  
This activity class enables students to learn about hiking and safety skills while enjoying the beautiful parks and open space of the Bay Area. Students will learn hike preparation, map reading and trail marking skills. Hiking sites vary; routes are from 4-10 miles long, and are often hilly terrain. There are no overnight hiking trips. CSU, UC (credit limits may apply to UC - see counselor)

PE-129  Fitness After Fifty  
- .5-2 units SC  
  - May be repeated three times  
  - Variable hours  
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 guidelines. Open to all students. CSU, UC (credit limits may apply to UC - see counselor)
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 comprehensive 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, UC (credit limits may apply to UC - see counselor)

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

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

PE-154  Badminton
.5-2 units SC
• May be repeated three times
• Variable hours
This is an activity course involving fundamental badminton techniques and strategies. Students will gain an understanding of the history, equipment, current rules, and scoring of badminton. In addition, students will develop stroke techniques, footwork skills, and knowledge of singles and doubles strategies. 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  Beginning Tennis
.5-2 units SC
• May be repeated three times
• Variable hours
This is an activity course intended to introduce students to the game of tennis. The course will involve basic stroking methods, conditioning techniques, historical background, rules, scoring, as well as 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, UC (credit limits may apply to UC - see counselor)

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  Competitive Football Skills
  .5-2 units SC
  • May be repeated three times
  • Variable hours
  • Recommended: competitive HS football experience or equivalent
This course will provide on-the-field instruction of competitive football skills. Emphasis is placed on techniques and skills specific to the various positions on a football team. Team play and strategies will be practiced. 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-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 is an activity class in individual and team skills in slow-pitch softball. The class will include proper hitting, catching and throwing, as well as game strategies. Rules of the game, equipment and safety considerations will also be addressed. 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-optional volleyball strategies. CSU, UC (credit limits may apply to UC - see counselor)

PE-195  Plyometrics and Agility Training for Female Athletes
  .25-1 unit SC
  • May be repeated three times
  • Variable hours
This course focuses on out-of-season physical training for the female athlete and is designed to help improve performance and minimize the potential for injury. Training will include progressive plyometric techniques, agility drills, flexibility exercises and core strengthening techniques. Health and nutritional issues specific to the female athlete will also be addressed. 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)
Physical education

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)

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-146 Adaptive Individualized Exercise
.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 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-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)

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)

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 neutralizes 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 combatives and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

PECMB-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 Ballet Fundamentals
.5-2 units SC
  • May be repeated three times
  • Variable hours
An introductory course in ballet technique. This class will focus on ballet barre, center adagio, allegro work, and across-the-floor combinations. It will also include an introduction to the history of the genre and principles of ballet as an art form. CSU, UC

PEDAN-134 Beginning Pointe Technique
.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 Jazz Dance Fundamentals
.5-2 units SC
  • May be repeated three times
  • Variable hours
An introductory course in jazz dance technique. This class will focus on technique, style, axial and locomotor movement. It will also include an introduction to the history of jazz dance. CSU, UC

PEDAN-138 Beginning Tap Dance
.5-2 units SC
  • May be repeated once
  • Variable hours
An activity course in beginning tap dance technique covering a range of tap dance styles, such as buck and wing, and rhythm tap dance. Cultural and historical aspects of this ethnic genre will be studied. CSU, UC

PEDAN-141 Intermediate Tap Dance
.5-2 units SC
  • May be repeated once
  • Variable hours
  • Prerequisite: PEDAN 138 or equivalent
An activity class to improve tap dance skills, enhance personal style and introduce more advanced tap dance steps and combinations. Tap dance history and culture as well as various tap styles will be studied. CSU, UC

PEDAN-142 Beginning Modern Dance
.5-2 units SC
  • May be repeated three times
  • Variable hours
An introductory course in modern dance technique. This class will focus on proper modern dance alignment, center work, and movement across the floor. It will also include an introduction of modern dance history. 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-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

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)

PEDAN-161 Swing Dance
.5-2 units SC
  • May be repeated three times
  • Variable hours
This dance technique class will introduce students to the Swing dances. The techniques, terminology, steps, patterns, rhythms, music and history of the various Swing dances will be covered. This is a social dance class, but a partner is not required. CSU, UC
PEDAN-162  Beginning Salsa and Latin Dance  
.5-2 units  SC
• May be repeated three times
• Variable hours
This dance technique class will introduce the student to the Latin dances, including Salsa. The techniques, terminology, steps, patterns, rhythms, music, history and development of a variety of Latin dances will be explored. This is a social dance class but a partner is not required. CSU, UC

PEDAN-163  Intermediate Salsa and Latin Dance  
.5-2 units  SC
• May be repeated once
Intermediate level Salsa and Latin dance for students interested in improving their skills in these dances and partnering techniques. Increasingly complex techniques, patterns, terminology, rhythms, music history and development of a variety of Latin dances will be explored. CSU, UC

PEDAN-165  Broadway Dance  
.5-2 units  SC
• May be repeated three times
• Variable hours
A dance technique class with an emphasis on American Broadway Musical dance. Dance styles from various musicals will be studied. Dance audition techniques for musicals will also be discussed. CSU, UC

Physical education intercollegiate – PEIC

PEIC-202A  Intercollegiate Basketball-A, Men  
2 units  SC
• May be repeated once
• 115 hours activity per term
• Recommended: Competitive high school basketball experience or equivalent
• 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 start of the sport season. CSU, UC (credit limits may apply to UC - see counselor)

PEIC-202B  Intercollegiate Basketball-B, 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 start of the sport season. CSU, UC (credit limits may apply to UC - see counselor)

PEIC-203A  Intercollegiate Basketball-A, Women  
2 units  SC
• May be repeated once
• 115 hours activity by arrangement per term
• Recommended: Competitive high school basketball experience or equivalent
• 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 start of the sport season. CSU, UC (credit limits may apply to UC - see counselor)

PEIC-203B  Intercollegiate Basketball-B, Women  
1 unit  SC
• May be repeated once
• 60 hours activity by arrangement per term
• Prerequisite: PEIC 203A 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 start of the sport 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: Competitive high school cross country experience or equivalent
Instruction and intercollegiate competition is offered in this sport to those students who are selected, based on tryouts, prior to the start of the sport 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: Competitive high school cross country experience or equivalent
Instruction and intercollegiate competition is offered in this sport to those students who are selected, based on tryouts, prior to the start of the sport 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
- Recommended: Competitive high school football experience or equivalent
Instruction and intercollegiate competition is offered in this sport to those students who are selected, based on tryouts, prior to the start of the sport 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: Competitive high school soccer experience or equivalent
Instruction and intercollegiate competition is offered in this sport to those students who are selected, based on tryouts, prior to the start of the sport 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: Competitive high school softball experience or equivalent
Instruction and intercollegiate competition is offered in this sport to those students who are selected, based on tryouts, prior to the start of the sport 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 by arrangement per term
- Recommended: Competitive high school swimming/diving experience or equivalent
Instruction and intercollegiate competition is offered in swimming and diving to those students who are selected, based on tryouts, prior to the start of the sport 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 by arrangement per term
- Recommended: Competitive high school swimming/diving experience or equivalent
Instruction and intercollegiate competition is offered in swimming to those students who are selected, based on tryouts, prior to the start of the sport 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: Competitive high school tennis experience or equivalent
Instruction and intercollegiate competition is offered in this sport to those students who are selected, based on tryouts, prior to the start of the sport 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: Competitive high school tennis experience or equivalent
Instruction and intercollegiate competition is offered in this sport to those students who are selected, based on tryouts, prior to the start of the sport 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: Competitive high school track and field experience or equivalent
Instruction and intercollegiate competition is offered in this sport to those students who are selected, based on tryouts, prior to the start of the sport 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: Competitive high school track and field experience or equivalent
Instruction and intercollegiate competition is offered in track and field to those students who are selected, based on tryouts, prior to the start of the sport 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 by arrangement per term
- Recommended: Competitive high school volleyball experience or equivalent

Instruction and intercollegiate competition is offered in this sport to those students who are selected, based on tryouts, prior to the start of the sport 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 by arrangement per term
- Recommended: Competitive high school water polo experience or equivalent

Instruction and intercollegiate competition is offered in this sport to those students who are selected, based on tryouts, prior to the start of the sport season. CSU, UC (credit limits may apply to UC - see counselor)

PEIC-225  Intercollegiate Water Polo, Women
3 units SC
- May be repeated three times
- 175 hours activity by arrangement per term
- Recommended: Competitive high school water polo experience or equivalent

Instruction and intercollegiate competition is offered in this sport to those students who are selected, based on tryouts, prior to the start of the sport season. CSU, UC (credit limits may apply to UC - see counselor)

Physical education theory – PETHE

Physical Education, Athletics and Dance Division
Diane Smith, Interim Dean
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 CAATEP 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 coaching credential to become a secondary school, coach, preparor 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
- Physical Education Theory
- Physical Education/Personal Training
- Sports Medicine/Athletic Training
- Exercise and Physical Fitness
- Nutrition: Science and Applications

Physical Education:
- 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

Certificates of achievement:
- Coaching
- Fitness instruction/personal training

Total units for the major 21-22
Physical education theory

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 210 Introduction to Kinesiology ................................ 3
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 is a two-year course of study designed for students who are interested in a career in the fitness industry. The associate in science degree is appropriate for those students who wish to become a personal trainer or group exercise instructor. All students will take the core courses as indicated and choose either the personal trainer or group exercise option. Completion of the degree will also prepare students to sit for one of the national personal training of group exercise instructor 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.

Major requirements
HSCI 230 Advanced First Aid and CPR ................................ 3
PETHE 259 Sports and Exercise Psychology ....................... 3
PETHE 281 Principles of Optimizing Human Performance .............. 3
PETHE 282 Exercise Techniques and Physical Fitness Training ............ 1
PETHE 284 Introduction to Sports Medicine and Athletic Training ............ 3

Plus at least 3 units from:
BIOSC 101 Fundamentals of Biological Science .................... 3
BIOSC 102 Fundamentals of Biological Science with lab ............. 4
BIOSC 116 Human Biology ........................................... 3
BIOSC 117 Human Biology with lab ................................... 4
BIOSC 120 Introduction to Human Anatomy and Physiology .......... 5
BIOSC 139 Human Anatomy .......................................... 5
BIOSC 140 Introduction to Human Physiology ........................ 5

Plus at least 3 units from:
HSCI 124 Health and Wellness ........................................ 3
HSCI 170 Women’s Health ............................................. 3

Plus at least 3 units from:
NUTRI 120 Sports Nutrition: Fueling the Athlete ..................... 3
NUTRI 160 Nutrition: Science and Applications ..................... 3

Emphasis requirements: All students will complete the core courses above and also select an area of emphasis below.

Personal training emphasis
PETHE 291 Professional Aspects of Personal Training and Fitness Instruction ........................................ 3

Group exercise emphasis
PETHE 293 Professional Aspects of Group Exercise Instruction ........................................ 2

Plus 3 units from a minimum of three courses from:
PE 107 Stretch and Yoga for Sports .................................. 0.5-2
PE 108 Beginning Hatha Yoga ........................................ 0.5-2
PE 116 Step Aerobics ................................................... 0.5-2
PE 121 Aerobics ......................................................... 0.5-2
PE 126 Super Circuit ...................................................... 0.5-2
PE 127 Hips, Thighs and Abs ............................................ 0.5-2
PE 128 Cardio Kickboxing .............................................. 0.5-2
PE 129 Cycling/Spinning Training ....................................... 0.5-2

Total units for the major 27-29

Electives
units from a selection of degree applicable courses 0-6

Total units for the degree 60

Recommended degree electives
BUSMG 191 Small Business Management ................................ 3
PETHE 279 Overview of Sports Medicine and Fitness Training ......................... 3
PETHE 285 Advanced Sports Medicine and Athletic Training ........................................ 3
PETHE 291 Professional Aspects of Personal Training ................................. 3
PETHE 293 Professional Aspects of Group Exercise Instruction ........................................ 2

Plus 3 units from a minimum of three courses from:
PE 107 Stretch and Yoga for Sports .................................. 0.5-2
PE 108 Beginning Hatha Yoga ........................................ 0.5-2
PE 116 Step Aerobics ................................................... 0.5-2
PE 121 Aerobics ......................................................... 0.5-2
PE 126 Super Circuit ...................................................... 0.5-2
PE 127 Hips, Thighs and Abs ............................................ 0.5-2
PE 128 Cardio Kickboxing .............................................. 0.5-2
PE 129 Cycling/Spinning Training ....................................... 0.5-2

Total units for the major 27-29

Associate in science degree - Sports medicine/athletic training
The associate in science degree in sports medicine/athletic training program is a two-year course of study designed for students interested in becoming allied health care professionals such as athletic trainers or physical therapists. It combines academic, laboratory and clinical experience to prepare students for further study or to obtain employment as an 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 a program advisor or counselor to ensure that the requirements for transfer to appropriate institutions of their choice 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.

**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**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>HSCI 230</td>
<td>Advanced First Aid/CPR</td>
<td>3</td>
</tr>
<tr>
<td>PETHE 259</td>
<td>Sports and Exercise Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PETHE 281</td>
<td>Principles of Optimizing Human Performance</td>
<td>3</td>
</tr>
<tr>
<td>PETHE 282</td>
<td>Exercise Techniques and Physical Fitness Testing</td>
<td>1</td>
</tr>
<tr>
<td>PETHE 284</td>
<td>Introduction to Sports Medicine and Athletic Training</td>
<td>3</td>
</tr>
</tbody>
</table>

**Plus at least 3 units from:**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>NUTRI 115</td>
<td>Nutrition and Health: Personal Applications</td>
<td>3</td>
</tr>
<tr>
<td>NUTRI 120</td>
<td>Sports Nutrition: Fueling the Athlete</td>
<td>3</td>
</tr>
<tr>
<td>NUTRI 160</td>
<td>Nutrition: Science and Applications</td>
<td>3</td>
</tr>
</tbody>
</table>

**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 personal trainer or group exercise instructor. All students will complete the core courses as indicated and then choose either the personal trainer or group exercise option. Completion of the certificate requirements will also prepare students to sit for one of the national personal training or group exercise instructor examinations.

**Total units required**

<table>
<thead>
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<tbody>
<tr>
<td>21-22</td>
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</tbody>
</table>

*Selected activity course or intercollegiate athletic participation must correlate with theory of coaching course.*
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. Courses are available in the day and evening.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
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<tr>
<td>HSCI 230 Advanced First Aid and CPR</td>
<td>3</td>
</tr>
<tr>
<td>PETHE 259 Sports and Exercise Psychology</td>
<td>3</td>
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<tr>
<td>PETHE 281 Principles of Optimizing Human Performance</td>
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<tr>
<td>PETHE 282 Exercise Techniques and Physical Fitness Testing</td>
<td>1</td>
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<tr>
<td>PETHE 284 Introduction to Sports Medicine and Athletic Training</td>
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</tbody>
</table>

**PETHE-187 Analysis of the Multiple Aspects of Modern Day Football**

- 0.5-2 units SC
- May be repeated three times
- Variable hours
- Recommended: tryout auditions or equivalent
- Formerly PE 187

Review and analyze offensive and defensive schemes of daily practice video and opponent game film. Implement and install weekly game plans on offense, defense, and special teams (kicking game). CSU

**PETHE-210 Introduction to Kinesiology**

- 3 units SC
- 54 hours lecture per term
- Recommended: eligibility for ENGL 122 or equivalent.

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. The course introduces students to the concepts and skills of locating, evaluating, synthesizing, and communicating information in various formats. CSU, UC (credit limits may apply to UC - see counselor)

**PETHE-259 Sports and Exercise Psychology**

- 3 units SC
- 54 hours lecture per term
- Recommended: eligibility for ENGL 122 or equivalent

This course addresses the scientific approach to the psychological component of sport and exercise performance. Topics such as personality, motivation, group dynamics, leadership, etc., will be covered. Specific psychological skills training methods for enhancing performance will be discussed. In addition, the connection between sport and exercise participation to health, wellness and psychological development will be addressed. CSU

**PETHE-260 Secondary School Coaching Certification**

- 0.5 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

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**PETHE-150 Topics in Physical Education Theory**

- 0.3-4 units SC
- May be repeated three times
- Variable hours
- Recommended: prerequisites may vary with topic offered, depending upon depth of topic
- Formerly PETHE 240

A supplemental course in physical education theory to provide a study of topics not covered in other courses or to address current developments in the field. Specific topics to be announced. 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 of instruction, skill analysis, practice progressions and theory of all facets of coaching basketball. The history, language, rules, strategies, fundamental skills, defensive play, offensive play, conditioning, mental aspects, methods of program building, and public relations will be covered. This course is appropriate for youth coaches and the player wanting to know more about the game. No previous coaching experience is necessary. 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, running 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  SC
- 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-275 Track and Field Officiating
2 units  P/NP
- 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, UC (credit limits may apply to UC - see counselor)

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-281 Principles of Optimizing Human Performance
3 units  SC
- 54 hours lecture per term
- Recommended: eligibility for ENGL 122 or equivalent
This course explores the body’s adaptations to exercise and teaches students how to develop fitness programs to maximize these strength and conditioning 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 fitness level or athletic performance. This knowledge will also prepare students intending to sit for national 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: PETHE 281 or equivalent (may be taken concurrently)
This course is a companion lab 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 who plan to sit for a national personal training examination. 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 laboratory 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, stretching and relaxation 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 122 or equivalent
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 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 or equivalent  
This course builds on concepts from PETHE 284. It will provide the student with the theoretical knowledge and practical skills necessary to evaluate and rehabilitate injuries. The medical and surgical management of injuries will be discussed in presentations by orthopedic surgeons and podiatrists. CSU

PETHE-286  Clinical Experiences in Sports Medicine and Athletic Training I  
2 units   SC  
- 108 hours laboratory by arrangement per term  
- Prerequisite: PETHE 284 or equivalent (may be taken concurrently)  
This course will expose students to basic injury prevention and care. The student will observe and assist athletic trainers in administering health care to the DVC athletes. Skills to be learned and performed include prophylactic taping and wrapping, immediate injury management and modality application. CSU

PETHE-287  Clinical Experiences in Sports Medicine and Athletic Training II  
2 units   SC  
- 108 hours laboratory by arrangement per term  
- Prerequisite: PETHE 285 (may be taken concurrently) and PETHE 286 or equivalent  
This course will expose students to athletic injury evaluation and career exploration. The student will observe and assist athletic trainers in evaluating and treating DVC athletes. This will be augmented by off-campus observations of physicians and therapists. CSU

PETHE-288  Clinical Experiences in Sports Medicine and Athletic Training III  
2 units   SC  
- May be repeated once  
- 108 hours laboratory by arrangement per term  
- Prerequisite: PETHE 286 or equivalent  
This course will expose the student to advanced athletic injury evaluation and rehabilitation. The emphasis in this course will be problem solving and professional development. The student will observe and assist athletic trainers in evaluating and rehabilitating DVC athletes. This will be augmented by off-campus observations of surgery. CSU

PETHE-291  Professional Aspects of Personal Training  
3 units   SC  
- 54 hours lecture per term  
- Recommended: PETHE 281 or equivalent  
- Formerly PETHE 280  
This course is for students who are, or aspire to be, personal trainers. It will provide practical information on how to become certified as a personal trainer, effectively work with clients, including those within special populations, as well as start and manage a personal training business. CSU

PETHE-292  Personal Training National Exam Preparation  
2 units   SC  
- 36 hours lecture per term  
- Recommended: PETHE 291 or equivalent  
This course is designed to provide students with the information necessary to sit for a National Personal Training Exam. It will expand upon information presented in other personal training courses to emphasize knowledge required for these exams. CSU

PETHE-293  Professional Aspects of Group Exercise Instruction  
2 units   SC  
- 18 hours lecture/54 hours laboratory per term  
- Recommended: PETHE 281 or equivalent  
This course prepares potential fitness instructors for the practical aspects of teaching and performing as a group fitness professional within the fitness industry. The areas to be covered include, but are not limited to, step aerobics, Hi/Lo aerobics, spinning, water aerobics, and kickboxing. Principles of group exercise instruction guidelines for group exercise class segments, music use and verbal cues, as well as practical teaching skills, equipment usage and safety will be included. Preparation for national examination will also be incorporated. CSU

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)

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 SC  
- 54 hours lecture per term  
- Prerequisite: MATH 110 or equivalent  
- Recommended: eligibility for ENGL 122 or equivalent  

An overview of the physical sciences of astronomy, physics, chemistry and earth science. The principles developed will be used to explain our present day knowledge of the universe and our physical environment. 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-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

**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

**Physics – PHYS**

Physical Sciences and Engineering Division  
Dennis Smith, Dean  
Physical Sciences Building 261  
925-685-1230 x 2359

**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-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 the physical sciences. CSU, UC (credit limits may apply to UC - see counselor).

**PHYSC-113 Topics in Physical Science**  
1-3 units LR  
- May be repeated three times  
- Variable hours  
- Prerequisite: MATH 110 and 114 or equivalent  

Introduction to the ideas of modern physics, including the relativity of space and time, Einstein's theory of gravity, the Big Bang Theory of the origin of the universe, the birth and death of stars, black holes, photons, atoms, quantum uncertainty, the nucleus, radioactivity, and nuclear energy. The emphasis will be on concepts, not mathematical problem solving. CSU

**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

**PHYS-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)

**PHYS-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 the physical sciences. CSU, UC (credit limits may apply to UC - see counselor).

**PHYS-113 Topics in Physical Science**  
1-3 units LR  
- May be repeated three times  
- Variable hours  
- Prerequisite: MATH 110 and 114 or equivalent  

Introduction to the ideas of modern physics, including the relativity of space and time, Einstein's theory of gravity, the Big Bang Theory of the origin of the universe, the birth and death of stars, black holes, photons, atoms, quantum uncertainty, the nucleus, radioactivity, and nuclear energy. The emphasis will be on concepts, not mathematical problem solving. CSU

**PHYS-120 General College Physics I**  
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 SEQA, CSU, UC (credit limits may apply to UC - see counselor)

**PHYS-121 General College Physics II**  
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 SEQA, 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  
• 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  
A: Mechanics and Wave Motion  
4 units   LR  
• 90 hours lecture/36 hours laboratory per term  
• Prerequisite: PHYS 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  

PHYS-230  Physics for Engineers and Scientists  
B: Heat and Electro-Magnetism  
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  
C: Optics and Modern Physics  
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 and 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)  

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Plumbing – PLUMB  

Physical Sciences and Engineering Division  
Dennis Smith, Dean  
Physical Sciences Building 261  
925-685-1230 x 2359  

PLUMB-110  OSHA-CPR  
1.5-2.5 units   LR  
• Variable hours  

• Note: This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section. This class is the same as STMFT 110.  

The regulations governed by OSHA 30, providing and recognizing safe work practices. Certification in Cardio-Pulmonary Resuscitation and First Aid. CSU  

PLUMB-111  Trade Mathematics  
1.5-2.5 units   LR  
• Variable hours  

• Note: This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section. This class is the same as STMFT 111.  

The approaches to mathematical problem solving used in pipe fitting and metric conversion. CSU
PLUMB-112 Water Supply Systems
1.5-2.5 units LR
• Variable hours
• Note: This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.
• Formerly PLUMB 151
The principles and methods of water distribution and treatment. CSU

PLUMB-113 Sewage Disposal
1.5-2.5 units LR
• Variable hours
• Note: This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.
• Formerly PLUMB 152
The principles and methods of sewage disposal for residential and commercial buildings. CSU

PLUMB-114 Plumbing System Service and Repair
1.5-2.5 units LR
• Variable hours
• Note: This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.
• Formerly PLUMB 153
The planning and troubleshooting of plumbing systems and repairs. CSU

PLUMB-115 Construction Management in Plumbing
1.5-2.5 units LR
• Variable hours
• Note: This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.
• Formerly PLUMB 154
An introduction to the administrative procedures, plans and specifications, scheduling, and other forms of communication in the construction field. CSU

PLUMB-116 Medical Gas Systems
1.5-2.5 units LR
• Variable hours
• Note: This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.
• Formerly PLUMB 155
The requirements and standards of medical gas and vacuum system installation. CSU

PLUMB-117 Related Science in the Piping Trades
1.5-2.5 units LR
• Variable hours
• Note: This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section. This class is the same as STMFT 117.
The scientific and mechanical principles that are basic to the work of the piping industry. CSU

PLUMB-118 Beginning Drawing and Plan Reading for the Piping Trades
1.5-2.5 units LR
• Variable hours
• Note: This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section. This class is the same as STMFT 118.
The interpretation of drawings and sketches associated with piping installation. CSU

PLUMB-119 Advanced Drawing in the Piping Trades
1.5-2.5 units LR
• Variable hours
• Note: This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section. This class is the same as STMFT 119.
Interpret, coordinate and make drawings and sketches associated with piping installation. CSU

PLUMB-120 Plumbing Tool Workshop I
1.5-2.5 units LR
• Variable hours
• Note: This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.
• Formerly PLUMB 250
The practical and theoretical aspects of plumbing tool processes. Students will learn the safe and proper use of the commonly used trade tools. CSU
PLUMB-121 Plumbing Tool Workshop II
1.5-2.5 units LR
- Variable hours
- Note: This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.
- Formerly PLUMB 251
The practical and theoretical aspects of plumbing tool processes. Students will learn the proper use and safety of advanced trade tools. CSU

PLUMB-122 Plumbing Code I
1.5-2.5 units LR
- Variable hours
- Note: This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.
- Formerly PLUMB 252
An introduction to the plumbing ordinances, articles 100-900, which provide minimum requirements and standards for public safety. CSU

PLUMB-123 Plumbing Code II
1.5-2.5 units LR
- Variable hours
- Note: This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.
- Formerly PLUMB 253
An introduction to the plumbing ordinances, articles 901-1622, which provide minimum requirements and standards for public safety. CSU

PLUMB-124 Welding for Plumbers
1.5-2.5 units LR
- Variable hours
- Note: This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.
- Formerly PLUMB 254
The techniques and methods of the welding process for plumbers. CSU

PLUMB-125 Electricity for Plumbing
1.5-2.5 units LR
- Variable hours
- Note: This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.
- Formerly PLUMB 270
The specialized knowledge and techniques required to make electrical systems operate and function effectively. CSU

PLUMB-126 Gas Installation in Plumbing
1.5-2.5 units LR
- Variable hours
- Note: This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.
Principles and installation methods of gas piping systems. CSU

PLUMB-127 Backflow Prevention
1.5-2.5 units LR
- Variable hours
- Note: This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.
Instruction on the approved methods and appropriate devices by which backflow and cross-connection can be eliminated. CSU

PLUMB-128 Plumbing Fixtures
1.5-2.5 units LR
- Variable hours
- Note: This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.
The modern techniques and practices of plumbing fixtures and appliances. CSU

PLUMB-129 Certification Preparation
1.5-2.5 units LR
- Variable hours
- Note: This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.
Preparation and review of information required for obtaining state plumbing certification. CSU
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-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

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 two times
- 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

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 two 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, UC (credit limits may apply to UC - see counselor)
Portuguese – PORT

Applied and Fine Arts Division
Michael Almaguer, Interim Dean
Humanities Building 112 and 113
925-685-1230 x 2312

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 sub-divisions. 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-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 behavioral, physiological, and psychological experiences of African Americans in the multicultural U.S. Topics chosen reflect the reciprocal impacts among majority European American cultures and historical waves of immigration of various different minority groups, using African Americans as a historical starting place, including assimilation, resistance, and acculturation. Particular attention will be paid to cultural, social, and historical contributions of African Americans, and how they have been viewed in relation to Latinos, Native Americans, and Asian-Pacific Americans over time. 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 behavioral, physiological, and psychological experiences of a variety of different groups within the Latino/Chicano cultural collective. Topics chosen reflect the reciprocal impacts among majority European American culture and historical waves of immigration of various different Latino groups, and other minority groups in the U.S., including assimilation, resistance, and acculturation. 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-145  Critical Thinking in Psychology
3 units  SC
• 54 hours lecture per term
• Prerequisite: ENGL 122 or equivalent
This course helps students develop critical thinking and writing skills necessary to analyze, evaluate, and make decisions concerning complex contemporary issues in psychology. Topics include the principles of inductive and deductive reasoning, the philosophy of science, strengths and weaknesses of the scientific method, distinguishing knowledge from beliefs, and the examination of paradigms in psychology. The course integrates critical thinking and writing skills with effective written expression. CSU
Psychology

PSYCH-155 Topics in Psychology
3-4 units SC
• May be repeated three times
• Variable hours
• Recommended: eligibility for ENGL 122 or equivalent
A supplemental course in psychology to provide a study of current concepts and problems in psychology and related subdivisions. Specific topics will be announced in the schedule of courses. CSU

PSYCH-160 Psychology of Women
3 units SC
• 54 hours lecture per term
• Recommended: eligibility for ENGL 122 or equivalent
• Formerly PSYCH 150
Examination of various factors in the development of gender identity, including personality, social processes, biology, and culture. CSU, UC

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-200 Life Span Development
3 units LR
• 54 hours lecture per term
• Recommended: eligibility for ENGL 122 or equivalent
This course examines the developmental changes and sociocultural events that take place during an individual's life span from infancy to old age. A major goal of this course is to introduce students to the psychological characteristics, personal/social challenges and developmental opportunities for each of life's age periods. A second goal of this course is to expose students to classic and contemporary theory and research in the area of life span development. Emphasis will be placed on life cycle theories, the role of heredity and environment, and the role of individual differences. Life stages will be viewed in terms of a variety of theoretical frameworks. CSU

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-215 Introduction to Research Methods in Psychology
3 units SC
• 54 hours lecture per term
• Recommended: eligibility for ENGL 122 or equivalent
This course is an introduction to the methods psychologists use to understand human behavior. Includes the philosophy of science and the examination of inductive and deductive reasoning methods and their relationship to theory. Topics include: experimental and non-experimental research designs; group and single-subject designs; APA-style report writing; research ethics. Activities include: performing a literature review; designing an original research study; collection and analysis of psychological data. CSU, UC

PSYCH-220 Psychology of Personality: Personal, Social, Cultural Differences
3 units SC
• 54 hours lecture per term
• Recommended: eligibility for ENGL 122 or equivalent
This course probes into the dynamics of personality development, adjustment, and growth. Particular emphasis is placed on contrasting the ideas and methodologies of the different schools of psychology, including Western and non-Western views. CSU, UC

PSYCH-225 Social Psychology
3 units SC
• 54 hours lecture per term
• Recommended: eligibility for ENGL 122 or equivalent
Social psychology is the scientific study of the way people think, feel, and behave in social situations. This course is an introduction to the perspectives, research methods, and empirical findings in social psychology. Topics include how people influence each other, the power of social situations, developing critical and integrative ways of thinking about theory and research, and the application of social psychological theories to everyday life experiences. 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
**Respiratory therapy**

**PSYCH-240 Transpersonal Psychology**

3 units  SC  
- 54 hours lecture per term  
- Recommended: eligibility for ENGL 122 or equivalent

Transpersonal psychology is the extension of psychological studies into consciousness studies, mind-body relationship, and the role of spiritual inquiry in human transformation. Ultimate human capacities such as peak and transcendent experiences, inspired creativity, altruistic ideals, and peak performance are examined. Transpersonal psychology suggests such capacities and experiences may be latent and can be developed. In exploring this theme, various approaches from ancient spiritual to modern scientific are critically examined. 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 advanced students to study topics of special interest under direction of the faculty. CSU

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**Real estate – RE**

See Business-Real Estate – RE

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**Respiratory therapy – RT**

**Associate in science degree - respiratory therapy**

The respiratory therapy (RT) program is offered as a joint 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 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 achievement and associate in science 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.

**Required general education courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Prerequisite</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 108</td>
<td>Introductory Chemistry</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>ENGL 122</td>
<td>Freshman English: Composition and Reading I</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MATH 110</td>
<td>Elementary Algebra</td>
<td></td>
<td>4</td>
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</tbody>
</table>

**Total prerequisite units**

11

**Major requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Prerequisite</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RT 101*</td>
<td>Principles of Respiratory Therapy</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>RT 101L*</td>
<td>Beginning Clinical Practice</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>RT 102*</td>
<td>Beginning Laboratory</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>RT 103*</td>
<td>Basic Patient Care</td>
<td></td>
<td>0.5</td>
</tr>
<tr>
<td>RT 104A*</td>
<td>Principles of Respiratory Therapy II</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>RT 104B*</td>
<td>Principles of Respiratory Therapy III</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>RT 105A*</td>
<td>Intermediate Laboratory I</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>RT 105B*</td>
<td>Intermediate Laboratory II</td>
<td></td>
<td>0.5</td>
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</table>

**plus at least 4 units from:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RT 106*</td>
<td>Intermediate Clinical Practice</td>
<td>2</td>
</tr>
<tr>
<td>RT 107*</td>
<td>Intermediate Clinical Practice</td>
<td>4</td>
</tr>
</tbody>
</table>

**plus all units from:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH 151*</td>
<td>Pharmacology</td>
<td>2</td>
</tr>
<tr>
<td>RT 108*</td>
<td>Principles of Respiratory Pathophysiology</td>
<td>1</td>
</tr>
<tr>
<td>RT 130A*</td>
<td>Advanced Respiratory Therapy I</td>
<td>3</td>
</tr>
<tr>
<td>RT 130B*</td>
<td>Advanced Respiratory Therapy II</td>
<td>1.5</td>
</tr>
<tr>
<td>RT 130L*</td>
<td>Advanced Clinical Practice</td>
<td>2</td>
</tr>
<tr>
<td>RT 131A*</td>
<td>Principles of Mechanical Ventilation I</td>
<td>2</td>
</tr>
<tr>
<td>RT 131B*</td>
<td>Principles of Mechanical Ventilation II</td>
<td>2.5</td>
</tr>
<tr>
<td>RT 132*</td>
<td>Advanced Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>RT 133*</td>
<td>Mechanical Ventilation Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>RT 134*</td>
<td>Neonatal and Pediatric Respiratory Care</td>
<td>1</td>
</tr>
<tr>
<td>RT 134L*</td>
<td>Laboratory and Clinical in Neonatal/Pediatric</td>
<td>1.5</td>
</tr>
<tr>
<td>RT 135*</td>
<td>Computer Simulations for Respiratory Care</td>
<td>0.5</td>
</tr>
<tr>
<td>RT 136*</td>
<td>Critical Care Clinical Practice</td>
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</tr>
<tr>
<td>RT 137*</td>
<td>Home Respiratory Care and Pulmonary Rehabilitation</td>
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</tr>
<tr>
<td>RT 138*</td>
<td>Special Rotations in Respiratory Care</td>
<td>0.5</td>
</tr>
<tr>
<td>RT 139*</td>
<td>Pulmonary Function Testing</td>
<td>1</td>
</tr>
<tr>
<td>RT 139L*</td>
<td>Clinical Practice in PFT</td>
<td>0.5</td>
</tr>
<tr>
<td>RT 145*</td>
<td>Cardiopulmonary Resuscitation</td>
<td>0.5</td>
</tr>
</tbody>
</table>

*These are Ohlone College courses.

**Total major units**

44.5

In addition to the above requirements, students must complete additional general education courses that meet Ohlone general education degree requirements. Students are advised to meet with a DVC counselor to select the most applicable general education courses.
Russian – RUSS

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
Michael Almaguer, Interim Dean
Humanities Building 112 and 113
925-685-1230 x 2312

Possible career opportunities
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.

Certificate of accomplishment - Russian
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.

To earn a certificate of accomplishment, students must complete each course used to meet a certificate requirement with a "C" grade or better.

complete 13-15 units from the following list of courses: units
RUSS 120 First Term Russian ............................... 5
RUSS 121 Second Term Russian ......................... 5
RUSS 220 Third Term Russian ............................ 5
RUSS 221 Fourth Term Russian ....................... 5
RUSS 230 Fifth Term Russian ............................ 3

Total units required .......................... 13-15

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-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
• Prerequisite: SIGN 280 or equivalent
• 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

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
Possible career opportunities
Social science fields are many and varied, as are the associated career opportunities. Careers with all levels of government, research and teaching are all possibilities. Most career options require more than two years of college study.

**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 historical 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**
Immigration and citizenship are the basis of American history and political development. Policies and concepts related to these have evolved significantly. This course will examine the Constitution, laws, Supreme Court decisions and movements that have impacted these changes. Within this context the experience of Asian and Pacific Islanders as immigrants, alien residents, refugees, nationals and citizens at the federal, state and local levels will be examined. Special consideration will be directed to race, class, gender and identity issues, and political status of Chinese, Japanese, Indian, Southeast Asians, Hawaiian, and Samoans as separate ethnic groups. CSU, UC

**SOCSC-120  Women and Social Change in the United States: 1890-Present**
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 community 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 examination 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, organizations, etc. CSU

**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
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 or equivalent
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, seminar 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 relations, sexuality, the family and urban life. Takes a social, historical 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, politics, 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 experiences 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

SOCIO-120 Introduction to Sociology
3 units SC
- 54 hours lecture per term
- Recommended: eligibility for ENGL 122 or equivalent
An introduction to the theory and scientific methodology of sociology: a survey of the interactions, 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-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

SOCIO-162 Italian Life and Culture
3 units SC
- 54 hours lecture per term
- Recommended: eligibility for ENGL 122 or equivalent
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, seminar 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 relations, sexuality, the family and urban life. Takes a social, historical and cultural approach to the study of contemporary Italian society. CSU

SOCIO-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, politics, economics, culture, and society of modern-day France. CSU

SOCIO-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 experiences and opportunities for women. CSU, UC

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
Selected students may pursue independent study in the social sciences under the guidance of the social science faculty. CSU

SOCIO-120 Introduction to Sociology
3 units SC
- 54 hours lecture per term
- Recommended: eligibility for ENGL 122 or equivalent
An introduction to the theory and scientific methodology of sociology: a survey of the interactions, 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

Sociology – 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.
Sociology

**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 issues. 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 or equivalent

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 gendered society. CSU, UC

**SOcio-125 Introduction to Marriage and Family**
3 units SC
- 54 hours lecture per term
- Recommended: eligibility for ENGL 122 or equivalent

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 European 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 or equivalent

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

**SOcio-155 Topics in Sociology**
.3-.4 units SC
- May be repeated three times
- Variable hours

A supplemental course in sociology to provide a study of current concepts and problems in sociology and related substantive areas. Specific topics will be announced in the schedule of courses. CSU

**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
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.

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 accomplishment - 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 accomplishment, students must complete each course used to meet a certificate requirement with a "C" grade or better.

complete 13-15 units from the following list of courses: units

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 ............................................. 3
SPAN 231  Sixth Term Spanish ............................................. 3
SPAN 250  Contemporary Spanish and Latin American Literature ............................................. 3

Total units required 13-15

Certificate of accomplishment - 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 121  Second Term Spanish .......................................... 5
SPAN 220  Third Term Spanish ............................................. 5
SPAN 221  Fourth Term Spanish .......................................... 5
SPAN 230  Fifth Term Spanish ............................................. 3
SPAN 231  Sixth Term Spanish ............................................. 3
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

This is a basic course in understanding, speaking, reading, and writing Spanish. It offers a balanced approach to 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

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

SPAN-150  Topics in Spanish
.3-4 units  SC

• May be repeated three times

• Variable hours

A supplemental course in Spanish to provide a study of current concepts and problems in Spanish and related subdivisions. Specific topics will be announced in the schedule of courses. CSU
SPAN-155  First Term Beginning Conversational Spanish
3 units  SC
• May be repeated once
• 54 hours lecture/18 hours laboratory by arrangement per term
• Note: this course does not satisfy the academic requirements of the SPAN 120-121 series or the SPAN 145, 146 and 147 series
This is the first term of the beginning Spanish 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

SPAN-156  Second Term Beginning Conversational Spanish
3 units  SC
• 54 hours lecture/18 hours laboratory by arrangement per term
• Recommended: SPAN 155 or equivalent
• Note: this course does not satisfy the academic requirements of the SPAN 120-121 series or the SPAN 145, 146 and 147 series
This is the second term of the beginning Spanish conversation series. It is a participatory class based on practical material with oral-aural practice. The preterit and imperfect tenses are introduced and contrasted. New vocabulary and cultural material is covered. CSU

SPAN-157  Third Term Beginning Conversational Spanish
3 units  SC
• 54 hours lecture/18 hours laboratory by arrangement per term
• Recommended: SPAN 156 or equivalent
• Note: this course does not satisfy the academic requirements of the SPAN 120-121 series or the SPAN 145, 146 and 147 series
This is the third term of the beginning Spanish conversation series. It is a participatory class based on practical material with oral-aural practice. The future and conditional tenses are emphasized and the subjunctive mood is introduced. New vocabulary and cultural material are covered. CSU

SPAN-220  Third Term Spanish
5 units  SC
• 90 hours lecture/18 hours laboratory by arrangement per term
• Recommended: SPAN 121 or equivalent
This is a third term intermediate Spanish course which develops fluency in understanding, speaking, reading and writing Spanish. The preterit and imperfect tenses and compound tenses are reviewed and refined, the uses of the present subjunctive are expanded and new vocabulary and idiomatic expressions are introduced. Selected readings about Latin American and Spanish culture and literature will be explored. This course is taught entirely in Spanish. CAN SPAN 8, SPAN 220+221 = CAN SPAN SEQ B, CSU, UC

SPAN-221  Fourth Term Spanish
5 units  SC
• 90 hours lecture/18 hours laboratory by arrangement per term
• Recommended: SPAN 220 or equivalent
This is a fourth term intermediate Spanish course which develops functional fluency in understanding, speaking, reading and writing Spanish. The use of the imperfect subjunctive is reviewed and expanded; the pluperfect subjunctive and the sequence of tenses are introduced as well as new vocabulary and idiomatic expressions. Selected readings about Latin American and Spanish culture and literature will be explored. This course is conducted entirely in Spanish. CAN SPAN 10, SPAN 220+221 = CAN SPAN SEQ B, CSU, UC

SPAN-230  Fifth Term Spanish
3 units  SC
• 54 hours lecture per term
• Recommended: SPAN 221 or equivalent
This is an advanced Spanish language course emphasizing 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-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
**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 paraeducator/instructional assistant certificate of achievement or degree are prepared for entry-level employment assisting students and individuals with disabilities in education and rehabilitation settings.

**Associate in arts degree**

Special education paraeducator/instructional assistant

**Certificate of achievement**

Special education paraeducator/instructional assistant

**Associate in arts degree - Special education paraeducator/instructional assistant**

The associate in arts degree in special education paraeducator/instructional assistant 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.

**general education requirements**

- ECE 124 Child Development and Psychology ............... 3
- 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 Classroom Strategies for the Special Education Paraeducator ..................................... 3

**Electives**

- plus at least 1 unit from:
  - COUN 115 Resiliency and Student Success .............. 1
  - PSYCH 115 Resiliency and Student Success .............. 1

- plus 2-4 units from:
  - COOP 170 Occupational Work Experience Education .... 1-4
  - COOP 170A Internship in Occupational Work Experience Education ............................................. 1-4

- plus at least 6 units from:
  - ECE 125 Introduction to Early Childhood Education ........ 3
  - 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
  - ECE 265 Working with Young Children with Special Needs .................................................... 2
  - ECE 269 Introduction to Special Needs in Young Children .......................................................... 3
  - 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
  - SIGN 282 American Sign Language (ASL) III .......... 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 paraeducator/instructional assistant**

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**

- ECE 124 Child Development and Psychology ............... 3
- 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 Classroom Strategies for the Special Education Paraeducator ..................................... 3
plus at least 1 unit from:
COUNS 115 Resiliency and Student Success ................. 1
PSYCH 115 Resiliency and Student Success ................. 1

plus 2-4 units from:
COOP 170 Occupational Work Experience Education ...... 1-4
COOP 170A Internship in Occupational Work Experience Education ......................... 1-4

plus at least 6 units from:
ECE 125 Introduction to Early Childhood Education ...... 3
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
ECE 265 Working with Young Children with Special Needs .......................................... 2
ECE 269 Introduction to Special Needs in Young Children ........................................... 3
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
SIGN 282 American Sign Language (ASL) III ....................... 3

Total units required 24-26

SPEDU-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 compares international perspectives to understand the changing role of people with disabilities. The legal and functional definitions of physical, communicative, sensory, psychological, neurological, and developmental disabilities will be emphasized. Students learn to differentiate acquired versus congenital disabilities and all forms of chronic/progressive illness will be explored. CSU

SPEDU-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

SPEDU-103 Classroom Strategies for the Special Education Paraeducator
3 units SC
• 54 hours lecture per term
• Recommended: eligibility for ENGL 122 or equivalent
This course explores the basic principles of pragmatic pro-social skills strategies used by the Special Education Paraeducator 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
Michael Almaguer, Interim Dean
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 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 8, CSU

SPCH-130  Small Group Communication
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. CSU

SPCH-140  Effective Listening
1 unit  P/NP
  • 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 or equivalent
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 or equivalent
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 or equivalent
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 or equivalent
Participation in speaking projects which include oral interpretation, prose, poetry, dramatic interpretation, duo interpretation, 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

See Physical Education Theory - PETHE
## Steamfitting – STMFT

Physical Sciences and Engineering Division
Dennis Smith, Dean
Physical Sciences Building 261
925-685-1230 x 2359

### STMFT-110 OSHA-CPR
1.5-2.5 units LR
- **Variable hours**
- **Note:** This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. This class is the same as PLUMB 110.
- **Formerly STMFT 151**
The regulations governed by OSHA 30, providing and recognizing safe work practices. Certification in Cardio-Pulmonary Resuscitation and First Aid. CSU

### STMFT-111 Trade Mathematics
1.5-2.5 units LR
- **Variable hours**
- **Note:** This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. This class is the same as PLUMB 111.
- **Formerly STMFT 152**
The approaches to mathematical problem solving used in pipe fitting and metric conversion. CSU

### STMFT-117 Related Science in the Piping Trades
1.5-2.5 units LR
- **Variable hours**
- **Note:** This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. This class is the same as PLUMB 117.
- **Formerly STMFT 153**
The scientific and mechanical principles that are basic to the work of the piping industry. CSU

### STMFT-118 Beginning Drawing and Plan Reading for the Piping Trades
1.5-2.5 units LR
- **Variable hours**
- **Note:** This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. This class is the same as PLUMB 118.
- **Formerly STMFT 154**
The interpretation of drawings and sketches associated with piping installation. CSU

### STMFT-119 Advanced Drawing in the Piping Trades
1.5-2.5 units LR
- **Variable hours**
- **Note:** This program is sponsored by the International Brotherhood of Steamfitters and Plumbers and is for apprenticeship only. This class is the same as PLUMB 119.
- **Formerly STMFT 155**
Interpret, coordinate and make drawings and sketches associated with piping installation. CSU

### 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-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.

### STMFT-251 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-252 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-253 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-260 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-261 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-262 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-263 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-264 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-265 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-266 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-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.

SPTUT-20  Supplemental Instruction
0 unit
• Non degree applicable
• 0 hour lecture per week
• Note: this is a non-credit course

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
Michael Almaguer, Interim Dean
Humanities Building 112 and 113
925-685-1230 x 2312

TAGLG-150 Topics in Tagalog
3-4 units SC
• May be repeated three times
• Variable hours
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
3 units SC
• May be repeated once
• 54 hours lecture per term
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
3 units SC
• May be repeated once
• 54 hours lecture per term
• Recommended: TAGLG 155 or equivalent
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

Transfer studies – CSU

Certificate of achievement - Transfer Studies - CSU

This certificate is designed for students planning to transfer to the California State University (CSU) System. It offers students a program of study which meets the CSU General Education requirements. 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 an Associate’s Degree. Although the certificate recognizes the completion of lower division CSU general education require-
ments, it does not guarantee admission to a specific campus within the CSU system nor does it guarantee admission to a specific major. Some majors and colleges may require a different lower division preparation and/or a higher GPA than is necessary for this certificate.

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)

units
from required courses for the major (CSU GE pattern)...............39
Total minimum units for the certificate 39

Transfer studies – IGETC

Certificate of achievement - Transfer Studies - IGETC

This certificate is designed for students planning to transfer to either the University of California (UC) or the California State University (CSU) System. It offers students a program of study which meets IGETC requirements. Many courses satisfy both IGETC and DVC general education requirement; however, the units are only counted once towards the 60 unit degree requirement for an Associate’s Degree. Although the certificate recognizes the completion of lower division IGETC require-
ments, it does not guarantee admission to a specific campus or school within the UC or CSU systems nor does it guarantee admission to a specific major. Some majors and colleges may require a different lower division preparation and/or a higher GPA than is necessary for this certificate.

Students who intend to transfer must meet all current IGETC 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 IGETC transfer information in this catalog)

units
required courses for the major (IGETC pattern)...............34-41
Total minimum units for the certificate 34-41

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.

required courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSCI 170</td>
<td>Women's Health</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 160</td>
<td>Psychology of Women</td>
<td>3</td>
</tr>
<tr>
<td>SOCSC 220</td>
<td>Women in United States Society</td>
<td>3</td>
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</table>

plus at least 9 units from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 101</td>
<td>Introduction to Substance Abuse and Treatment</td>
<td>3</td>
</tr>
<tr>
<td>ADS 155</td>
<td>Diverse Communities and Social Service</td>
<td>3</td>
</tr>
<tr>
<td>ADS 170</td>
<td>Introduction to Codependency and Family Issues</td>
<td>3</td>
</tr>
<tr>
<td>ECE 124</td>
<td>Child Development and Psychology</td>
<td>3</td>
</tr>
<tr>
<td>ECE 134</td>
<td>Family Communication and Interaction</td>
<td>1-3</td>
</tr>
<tr>
<td>ECE 150</td>
<td>Topics in Child Development</td>
<td>1-3</td>
</tr>
<tr>
<td>HSCI 140</td>
<td>Human Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 220</td>
<td>Women in United States Society</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO 120</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO 125</td>
<td>Introduction to Marriage and Family</td>
<td>3</td>
</tr>
<tr>
<td>SOCSC 120</td>
<td>Women and Social Change in the U.S.: 1890-Present</td>
<td>3</td>
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</table>

plus at least 3 units from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSIM 075</td>
<td>Business Training Workshops - Level I</td>
<td>0.5-1</td>
</tr>
<tr>
<td>BUSIM 110</td>
<td>Keyboarding I- Beginning Keyboarding</td>
<td>3</td>
</tr>
<tr>
<td>CIS 050-099</td>
<td>Various computer applications</td>
<td>0.3-2</td>
</tr>
<tr>
<td>COMSC 100L</td>
<td>Introduction to Computer Software</td>
<td>1</td>
</tr>
</tbody>
</table>

plus at least 3 units of:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOP 170</td>
<td>Occupational Work Experience</td>
<td>1-4</td>
</tr>
</tbody>
</table>

Total units required 24
Faculty and academic administrators

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### Faculty and academic administrators

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Faculty/Program</th>
<th>Degrees/Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abajian, Kathryn</td>
<td>faculty - English</td>
<td></td>
<td>B.A. - Brigham Young, M.A. - San Francisco State University</td>
</tr>
<tr>
<td>Abbott, Daniel</td>
<td>faculty - architecture</td>
<td>B.A. - University of Oregon</td>
<td></td>
</tr>
<tr>
<td>Akanyirige, Emmanuel</td>
<td>faculty - math</td>
<td>B.S., M.S. - Ball State University</td>
<td></td>
</tr>
<tr>
<td>Akiyama, Mark</td>
<td>faculty - psychology</td>
<td>B.A., Ph.D. - UC Berkeley</td>
<td></td>
</tr>
<tr>
<td>Almaguer, Michael</td>
<td>faculty - art</td>
<td>B.A. - UC Davis, M.F.A. - San Francisco Art Institute</td>
<td></td>
</tr>
<tr>
<td>Appell, Glenn</td>
<td>faculty - music</td>
<td>B.A. - Hunter College, New York</td>
<td></td>
</tr>
<tr>
<td>Armstrong, Terry L.</td>
<td>dean of counseling and student support services</td>
<td>B.A., M.A. - CSU Fresno</td>
<td></td>
</tr>
<tr>
<td>Avanessian, Garen</td>
<td>faculty - engineering</td>
<td>B.S. - Pahlavi University, Iran, M.S., Ph.D. - University of Wales, UK, M.S. - San Jose State University</td>
<td></td>
</tr>
<tr>
<td>Bach, Daniel J.</td>
<td>faculty - mathematics</td>
<td>B.A., M.A. - UC Berkeley</td>
<td></td>
</tr>
<tr>
<td>Bailey, Jamie Lynn</td>
<td>counselor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bairos, Monte</td>
<td>faculty - music</td>
<td>A.A. - Merced College, B.A. - CSU Stanslaus, M.M. - University of Colorado, Boulder</td>
<td></td>
</tr>
<tr>
<td>Barber, Thomas P.</td>
<td>faculty - English</td>
<td>B.A. - St. Mary's College, M.A. - San Francisco State University</td>
<td></td>
</tr>
<tr>
<td>Barlow, Andrew L.</td>
<td>faculty - social sciences</td>
<td></td>
<td>B.A. - Oberlin College, M.A., Ph.D. - Harvard University</td>
</tr>
<tr>
<td>Barneson, Linda J.</td>
<td>faculty - physical education</td>
<td>B.S. - CSU Hayward, M.A. - University of Minnesota, M.Ed. - University of La Verne</td>
<td></td>
</tr>
<tr>
<td>Barlow, Andrew L.</td>
<td>faculty - social sciences</td>
<td></td>
<td>B.A. - Oberlin College, M.A., Ph.D. - Harvard University</td>
</tr>
<tr>
<td>Barstow, Leon</td>
<td>faculty - chemistry</td>
<td></td>
<td>B.A. - University of Illinois, M.S. - UC Berkeley</td>
</tr>
<tr>
<td>Boyd, Linda R.</td>
<td>faculty - dental assisting</td>
<td></td>
<td>Registered Dental Assistant, Certified Dental Assistant, B.A. - CSU Hayward</td>
</tr>
<tr>
<td>Brecha, Jane</td>
<td>faculty - mathematics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breton, Hopi</td>
<td>faculty - art</td>
<td>B.A. - Loyola University, M.F.A. Montana State University</td>
<td></td>
</tr>
<tr>
<td>Browne, Susan M.</td>
<td>faculty - English</td>
<td></td>
<td>B.A., M.A. - CSU Chico</td>
</tr>
<tr>
<td>Budd, Gary R.</td>
<td>faculty - English</td>
<td></td>
<td>B.A., M.A. - CSU Sacramento</td>
</tr>
<tr>
<td>Burns, Laura</td>
<td>faculty - chemistry</td>
<td></td>
<td>B.S. - Texas Lutheran College, Ph.D. - UC Davis</td>
</tr>
<tr>
<td>Burns, Robert</td>
<td>faculty - computer sciences</td>
<td></td>
<td>B.S., M.S., Ph.D. - Purdue University</td>
</tr>
<tr>
<td>Carter, Cheryl</td>
<td>counselor</td>
<td></td>
<td>B.A., M.A. - CSU Hayward</td>
</tr>
<tr>
<td>Carter, Hilton</td>
<td>faculty - dental technology</td>
<td></td>
<td>A.A. - Diablo Valley College, B.A. - St. Mary's College, Certified Dental Technologist, M.A. - United International University</td>
</tr>
<tr>
<td>Castle, Karen</td>
<td>faculty - physical science</td>
<td></td>
<td>B.S., M.S., Ph.D. - University of Michigan</td>
</tr>
<tr>
<td>Chambers, Carla J.</td>
<td>counselor</td>
<td></td>
<td>B.S. - Central State University, M.A. - Ohio State University</td>
</tr>
</tbody>
</table>

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Faculty and academic administrators

Chisar, Michael  
faculty - physical education  
(sports medicine)  
B.S. - CSU Fullerton  
M.S. Hakeme University, Pennsylvania

Chatagnier, Thomas J.  
faculty - electronics  
A.A. - Diablo Valley College  
B.S. - San Jose State University  
M.A. - St. Mary’s College

Chiu, Jeannie  
faculty - English  
A.B. - Cornell University  
Ph.D. - UC Berkeley

Churchill, Peter D.  
faculty - business administration  
B.M. - University of Pacific  
M.A. - CSU Los Angeles  
J.D. - American College of Law

Christian-Miller, Suzanne  
faculty - mathematics  
B.A. - Mills College  
M.A. - Cornell University

Coccimiglio, Steven L.  
faculty - physical education  
B.A. - University of Hawaii  
M.A. - St. Mary’s College

Colchico, Kristen  
faculty - health science  
B.S. - CSU East Bay  
M.S. - Indiana State University  
Ed.D. - Columbia University

Collazo, Monserrate  
faculty - mathematics  
B.S., M.S. - University of Puerto Rico

Connor, Michael W.  
faculty - physics  
B.A. - UC San Diego  
M.S., Ph.D. - UC Davis

Cook, Bruce  
faculty - music  
B.A. - Greensboro College  
M.A. - University of North Carolina  
Ph.D. - University of Colorado

Cooke, Susan E.  
faculty - family life  
B.A. - UC Berkeley  
M.S. - CSU Hayward

Costa, Kathleen  
counselor, faculty  
A.A. - San Joaquin Delta College  
B.A. - John F. Kennedy University  
M.S. - CSU Hayward

Crouse, Marina  
faculty - Spanish  
B.A., M.A., Ph.D. - UC Berkeley

Dannels, Lupe Carvajal  
counselor  
B.A. - UC Riverside  
M.A. - CSU Fresno

Day, Victoria L.  
faculty - dental hygiene  
B.A. - UC Santa Cruz  
B.S., D.D.S. - San Francisco State University

Deason, Nancy  
faculty - learning disabilities specialist  
B.A. - University of North Carolina  
M.A. - New York University

Delgado, Rita  
counselor  
B.A. - UC Berkeley  
M.S. - CSU Hayward

DeLoach, Marva L.  
librarian  
B.S. - Savannah State College  
M.S.L.S. - Atlanta University  
Ph.D. - University of Pittsburgh

DeMarco, Helen  
faculty - nutrition  
B.S. - University of Oregon  
M.S. - San Jose State University

Denning, Joann  
faculty - multimedia  
B.A. - UC San Diego  
M.F.A. - UC Davis

DePew, Ralph  
faculty - physical education  
B.A. - San Francisco State University  
M.S. - St. Mary’s College

Di Bari, Isabella Castellano  
faculty - English  
B.A. - CSU Northridge  
M.A. - San Francisco State University (2)

Dickinson, Jean E.  
faculty - journalism  
A.A. Mt. San Antonio College, Walnut, CA  
B.A. - Stanford University  
M.J. - UC Berkeley

Dinwiddie, Denise  
faculty - English  
B.S., M.Ed. - University of Missouri

Dixon, Martha L.  
faculty - biological science  
B.A., Ph.D. - UC Berkeley  
Teaching Credential - San Francisco State University

Dorn, Ileana  
director of admissions and records  
B.A., M.Ed. - Seattle University

Dougan, Susana “Raine”  
faculty - EOPS  
B.A., B.S. - UC Berkeley  
M.A. - Pacifica Graduate Institute

Draa, Christopher  
chef, faculty - culinary arts  
A.A. - Diablo Valley College  
Certificate - California Culinary Academy
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Faculty and academic administrators

Duke, Carla
faculty - mathematics
B.A. - Vassar
M.S. - CSU Hayward

DuLaney, Keri
faculty - English
B.A. - UC Irvine
M.A. - San Diego State University

Duwe, Axel
faculty - biological sciences
B.S., Ph.D. - University of Western Ontario, Canada
J.D. - John F. Kennedy University

Eckel, Charles
faculty - mathematics
B.S. - University of Kentucky
Ph.D. - UC Berkeley

Edwards, Karen
faculty - mathematics
B.A., Ph.D. - UC Berkeley

Eisa, Mohamed
dean of planning, research and student outcomes
B.A. - University of Alexandria in Egypt
M.A. - Michigan State University

Espiritu, Florence
librarian
A.A. Los Medanos
B.A. - UC Davis
M.L.I.S University of Washington

Eustes, Robert D.
faculty - hotel and restaurant management
A.A. City College of San Francisco
B.A. - San Francisco State University
M.B.A. - Golden Gate University

Fannin, Antonia
faculty - English
B.A. - UC Berkeley
M.A. - San Francisco State University

Farmer, Philip
faculty - mathematics
B.A. - UC Berkeley
M.A. - San Francisco State University

Fischer, Laurence E.
faculty - English
B.A. - University of Illinois
M.A. - San Francisco State University

Flores-Lowry, Josephine T.
faculty - physical education
B.A., M.A. - University of the Pacific

Foster, Judy
faculty - business education
A.A. - Diablo Valley College
B.A. - San Francisco State University

Fournier, Teresa
faculty - psychology
B.A., M.A. - San Francisco State University

Freidenreich, Eric
faculty - mathematics
B.A. - UC Los Angeles
M.A. - UC San Diego

Freytag, John
faculty - oceanography
B.S. - UC Santa Barbara
Ph.D. - Pennysylvania State University

Gallin, Lenore J.
faculty - anthropology
B.A. - University of Illinois
M.A. - UC Berkeley
Ph.D. - UC Los Angeles

Galvin, Daniel J.
faculty - accounting
B.S. - University of San Francisco
Certified Public Accountant

Gard, Karen
faculty - health science
B.S., M.S., D.V.M. - UC Davis

Gelinas, Richard P.
faculty - biological science
B.S. - UC Berkeley
Ph.D. - UC Davis

Gerkin, Craig
faculty - chemistry
B.S. - SUNY Stony Brook
Ph.D. - UC Berkeley

Gilmore, Raymond
faculty - business
A.A. - City College of San Francisco
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faculty - economics
B.A. - American University, Cairo
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Godinez, Richard
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A.A. - Ohlone College
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M.F.A. - Stanford University

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M.A. - San Francisco State University

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faculty - history
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B.S., B.A. - UC Davis
Ph.D. - UC Santa Cruz

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faculty - biology/oceanography
B.A. - University of San Diego
Ph.D. - UC Santa Barbara

Guess, Paul R.
faculty - English
B.A., M.A. - San Francisco State University
J.D. - Hastings College of Law

Guidone, Franco A.
faculty - foreign language
B.A. - CSU Long Beach
M.A., Ph.D. - UC Berkeley

Halm, Jacqueline D.
faculty - humanities
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Hammar, Kris R.
faculty - health science
B.S. - UC Berkeley
M.S. - San Francisco State University

Hammond, Lynn
faculty - English
B.S. - Duke University
M.S., Ph.D. - University of Southern California

Hammond, William
faculty - computer information systems
B.S. - Rutgers University

Hanecak, John
instructor - speech
B.S. - St. Mary’s College
M.A. - CSU, Hayward
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Knight, Lynn M.
faculty - mathematics
B.A. - University of the Pacific
M.A. - UC Berkeley

Koller, Bruce
faculty - economics
A.A. - College of San Mateo
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M.A. - UC Santa Barbara

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Ph.D. California School of Professional Psychology

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B.S. - Southern Oregon State University
M.F.A. - Montana State University

McN solver, Pamela R.
counselor, faculty - psychology
B.A., M.A. - San Francisco State University
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<td>M.S., M.P.H. - UC Berkeley</td>
<td>Registered Dietitian</td>
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<td>Moreno, Melinda</td>
<td>learning disability specialist</td>
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<td>Morrissey, Matthew</td>
<td>faculty - administration of justice</td>
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<td>C.A. - UC Davis</td>
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</tr>
</tbody>
</table>
Pieroni, Gary  
faculty - accounting  
B.A. - CSU Hayward  
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Pineda, Marylou  
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<td>Stallings, Kenley W.</td>
<td>faculty - computer information systems</td>
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<tr>
<td>Stanfield, Paula</td>
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<td>B.A. - Cal Poly, SLO M.S.W. - UC Berkeley</td>
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<tr>
<td>Steidel, Mark H.</td>
<td>faculty - music</td>
<td>B.A. - University of Oregon M.A. - Mills College</td>
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<tr>
<td>Stone, Emily</td>
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<td>B.A. - University of Oregon M.A. - Mills College</td>
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<td>Symonds, Joan M. L.</td>
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<td>B.A. - CSU Chico</td>
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<td>Taugher, Kimberly</td>
<td>faculty - biology</td>
<td>M.S. - Mills College</td>
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<td>Teel, Gay</td>
<td>faculty - dental</td>
<td>B.S., M.A. - CSU Long Beach</td>
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<td>Tejada, Jennifer</td>
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<td>Tejada, Mario</td>
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<td>A.A. - Diablo Valley College B.S. University of San Francisco</td>
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<td>Teresh, Tonia</td>
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<td>Thomas, John</td>
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<td>Tilles, Gregory H.</td>
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<td>Tokuyama, M. Yukie</td>
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<td>A.B. - UC Los Angeles M.A. - University of Washington</td>
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<td>Toloui, Karen</td>
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<td>Torre, Dorothy A.</td>
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<tr>
<td>Trujillo, Edward M.</td>
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<td>Valdez, Joe G.</td>
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<td>Valmore, Kimberly</td>
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<td>Vazquez, Obed</td>
<td>faculty - sociology</td>
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<td>Vela, David</td>
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<td>Vilas, Danni L.</td>
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<tr>
<td>Walensky, W. Michael</td>
<td>faculty - humanities</td>
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<tr>
<td>Walker, Ted G.</td>
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<tr>
<td>Walters, Judy E.</td>
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<td>Walters, Julia</td>
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<td>Wapner, Donna Sue</td>
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<tr>
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<tr>
<td>Weitzel, Gabriele</td>
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<td>M.S., Ph.D. - University of Bremen, Germany</td>
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<tr>
<td>Westlake, Rachel</td>
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<td>White, Kenneth</td>
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<td>Wieden, Fredrick Ted</td>
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<tr>
<td>Wilhelm, Fritz</td>
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<td>Willett, Peter</td>
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<td>Wothe, Kathleen H.</td>
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<td>Young, Tish Ann</td>
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Abbott, Leslie K. ........................ drama
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Aguallo, Lillian .................. counselor, psychology
Ashby, Denise S. ....................... speech
Atkins, Donna R. ......................... English
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Berger, Phyllis ......................... philosophy
Berman, Harvey ................. speech, drama
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Bronzanz, Jo Ann P. ................ physical education
Brooks, Stephen A. ............. physical science
Broom, Joy ................................ art
Brown, Frances R. .................... art
Bruckmeier, Kenneth E. .......... music
Brunner, Donald .................... physical science
Bryan, Gaylord ...................... physical education
Bryan, Nancy L. .................... physical education
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Chaplin, Leonard ............ physical education
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Clare, Charles J. ............... mathematics
Collins, Phillip R. ............... physical science
Cooper, Richard E. ................ engineering
Costa, James A. .................. physical education
Cottam, Grant E. ................ construction technology
Cottrill, Charles L. .......... biological science
Crooks, Thomas ................... mathematics
Cross, Jerry ....................... psychology
Custodio, Vincent R. .......... counselor
Dantzler, Robert N. ............. English
Davis, Charles W. ................ music
Dembe, Cheryl L. ................ chemistry
Dennis, Charles W. .......... architecture
DeShera, James ................... music
De Vito, Sam J. ................... physical education
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Dudley, Richard E. .......... social science
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Dunlap, Elaine .................. humanities
Dunn, Natalie ..................... English
Duvall, Vernon L. ............ chemistry
Eastman, Mark D. ........ psychology
Eddy, Lorraine S. ................ history
Ericson, Robert W. .......... physical education
Evans, Bert L. ................... electronics
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Wynne, Robert .......... counselor

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Telephone directory

Students may call DVC or SRC by dialing the appropriate “General Number” and an extension.

If using a touch-tone telephone, 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 telephone, when the call has been answered, wait for the operator.

On-campus emergency: 2333 or call 9-911 from any telephone.

<table>
<thead>
<tr>
<th>DVC general number (925) 685-1230</th>
</tr>
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<tbody>
<tr>
<td><strong>area</strong></td>
</tr>
<tr>
<td>DVC Campus</td>
</tr>
<tr>
<td>Admissions and Records Office (925)</td>
</tr>
<tr>
<td>Fax (925) 609-8085</td>
</tr>
<tr>
<td>Assessment Center</td>
</tr>
<tr>
<td>Book Center (925) 682-7363</td>
</tr>
<tr>
<td>Career and Employment Services</td>
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<tr>
<td>Career Development Services</td>
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<tr>
<td>Cashier’s Office</td>
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<tr>
<td>Contract Education</td>
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<tr>
<td>Counseling Center</td>
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<tr>
<td>Dental Hygiene Clinic</td>
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<tr>
<td>Developmental Children’s Center</td>
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<tr>
<td>Disabled Students Program</td>
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<tr>
<td>Emergency</td>
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<tr>
<td>Emeritus College (906-9105 day or 906-9106 evening)</td>
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<tr>
<td>EOPS Office</td>
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<td>Financial Aid</td>
</tr>
<tr>
<td>Information Center</td>
</tr>
<tr>
<td>International Student Admission and Services</td>
</tr>
<tr>
<td>SRC General Number (925) 866-1822</td>
</tr>
<tr>
<td>SRC Division Office</td>
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<tr>
<td>Admissions and Records Office (925)</td>
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<tr>
<td>Bookstore</td>
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<tr>
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**DVC Division Offices**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Peer Support Center</td>
<td>2616</td>
</tr>
<tr>
<td>Police Services</td>
<td>2339/2338</td>
</tr>
<tr>
<td>Norseman Restaurant</td>
<td>2300</td>
</tr>
<tr>
<td>Study Abroad Program</td>
<td>2563/2735/2357 (925) 687-4445</td>
</tr>
<tr>
<td>Ticket Office</td>
<td>2357/2339/2338</td>
</tr>
<tr>
<td>TDD (for hearing impaired)</td>
<td>(925) 682-0340</td>
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**San Ramon Campus**

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<tr>
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<tr>
<td>Biological and Health Sciences and P.E.</td>
<td>2230/2372</td>
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<tr>
<td>Business Education and English</td>
<td>2273/2499</td>
</tr>
<tr>
<td>Counseling and Support Services</td>
<td>2282</td>
</tr>
<tr>
<td>Math/Computer Science</td>
<td>2608</td>
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<tr>
<td>Physical Science/Engineering</td>
<td>2423</td>
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<td>2250</td>
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### Main campus map

<table>
<thead>
<tr>
<th>service/program</th>
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<tbody>
<tr>
<td>Administration</td>
<td>AB... CD2</td>
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<tr>
<td>Administration of Justice</td>
<td>FO... D3</td>
</tr>
<tr>
<td>Admissions and Records Office</td>
<td>SS... C4</td>
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<tr>
<td>Advanced Technology Center</td>
<td>ATC... D1</td>
</tr>
<tr>
<td>Arena Theater</td>
<td>AB... C5</td>
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<tr>
<td>Art/Photography Gallery</td>
<td>A... B4</td>
</tr>
<tr>
<td>Assessment Center</td>
<td>SSC... E4</td>
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<tr>
<td>Associated Students of DVC/Clubs</td>
<td>SU... C5</td>
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<tr>
<td>Book Center</td>
<td>BC... D4</td>
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<tr>
<td>Business/Foreign Language</td>
<td>BFL... B2-3</td>
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<tr>
<td>Cafeteria</td>
<td>CC... C4</td>
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<tr>
<td>CalWORKS</td>
<td>SSC... C4</td>
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<td>Career and Employment Services</td>
<td>SSC... C4</td>
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<td>Cashier</td>
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<tr>
<td>Child Center</td>
<td>FLA... BC2</td>
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<td>College for Kids</td>
<td>FOA... E2</td>
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<td>Community Conference Center</td>
<td>CCC... B3</td>
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<td>Cooperative Education</td>
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<td>Counseling Center</td>
<td>C... D3</td>
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<tr>
<td>Dental Clinic</td>
<td>LHS... D1</td>
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<tr>
<td>Diablo Room</td>
<td>CC... C4</td>
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<td>Disability Support Services, “DSS”</td>
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<tr>
<td>Early Childhood Education</td>
<td>FL... C2</td>
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<td>Engineering Technology</td>
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<tr>
<td>EOPS/CARE</td>
<td>SSC... C4</td>
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<td>ESL</td>
<td>LC... D3</td>
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<td>AB... D2</td>
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<td>Financial Aid Office</td>
<td>SS... C4</td>
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<td>Forum</td>
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<td>Foundation</td>
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<td>Gymnasium</td>
<td>GYM... D6</td>
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<td>Horticulture</td>
<td>OH... B7</td>
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<td>Hotel and Restaurant Management</td>
<td>HRM... D4</td>
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<td>Humanities</td>
<td>H... BC3</td>
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<td>Human Resources</td>
<td>AB... CD2</td>
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<td>Information Center</td>
<td>SSC... C4</td>
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<td>International Students Program</td>
<td>SSC... C4</td>
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<td>Job Placement Center</td>
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<td>Library</td>
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<td>Life and Health Sciences</td>
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<td>Norseman Restaurant</td>
<td>CC... C4</td>
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<td>Peer Support Center</td>
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<td>Performing Arts Center</td>
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<tr>
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<td>PE... C6</td>
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<td>PS... E2</td>
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<td>Planetarium</td>
<td>PL... DE1</td>
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<td>Police Services</td>
<td>POL... E4-5</td>
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<tr>
<td>President’s Office</td>
<td>AB... C2</td>
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<tr>
<td>Registration Annex</td>
<td>SSC... C4</td>
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<td>Scholarship Office</td>
<td>AB... C2</td>
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<td>Science Center</td>
<td>SC... DE1</td>
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<td>Student Life Office</td>
<td>SU... CD5</td>
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<td>Student Services Center</td>
<td>SSC... C4</td>
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<td>Student Union</td>
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<td>FO... C2-3</td>
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<tr>
<td>Technical Education</td>
<td>ET... DE4</td>
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<td>Television Studio</td>
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<td>Transfer Center</td>
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<td>Tutorial Services</td>
<td>L... F2</td>
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<td>Trophy Room</td>
<td>OC... CD4</td>
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<td>Veteran’s Services</td>
<td>SSC... C4</td>
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<tr>
<td>Viking Field</td>
<td>VF... F6</td>
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<tr>
<td>Women’s Programs</td>
<td>SSC... C4</td>
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<tr>
<td>WorkAbility III Program</td>
<td>SSC... C4</td>
</tr>
</tbody>
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### DVC campuses and centers

#### To DVC Pleasant Hill
630 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.

#### To SRC - San Ramon Campus
1690 Watermill, Road, San Ramon
Take 680 exit on Bollinger Canyon Rd. Proceed eastbound approximately 4 miles. Right on Watermill Road. Left on SRC Campus

#### WCC - Walnut Creek Center
1250 Amoyo Way, Walnut Creek

#### CSUEB - California State University East Bay, Concord
4700 Ygnacio Valley Road, Concord

---

**To DVC Pleasant Hill**

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