Contra Costa Community College District Administration

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

District and college history

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

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

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

Formerly known as East Contra Costa Junior College, DVC officially began offering courses in 1949 in some of the most unlikely sites: high schools, banks, churches, and even an old army camp. On October 5, 1950, the College Board of Trustees purchased a piece of land for the college’s permanent home at a cost of $172,500. Originally home to the Costanoan Indians, the land was granted to William Welch in 1844 by the Mexican government. The parcel became part of 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 Valley Center, 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 Valley Center in Dougherty Valley opened its doors to students in November of 2006. DVC employs more than 1,100 faculty and staff, and serves nearly 22,000 students each semester. Among community colleges, DVC has one of the highest rates of transfer to the University of California, California State University, and other in-state private and out-of-state institutions.

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 for 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 (DVC) is passionately committed to student learning through the intellectual, scientific, artistic, psychological, and ethical development of its diverse student body. DVC prepares students for transfer to four-year universities; provides career and technical education; supports the economic development of the region; offers pre-collegiate programs; and promotes personal growth and 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 admission 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 workforce, 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 career/technical 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.

5. Personal growth and lifelong learning
In addition to these primary missions, the college acknowledges and honors its traditional role as a center for lifelong learning by providing classes, 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 Valley Center; and at other various locations throughout the district.

DVC day programs

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

DVC evening and weekend programs

Many full-term and short-term classes 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 classes. Students can also complete the requirements for many certificates of achievement at night. See the class schedule for a listing of those career/technical programs that may be completed during evenings and/or weekends.

Online and hybrid classes

DVC and SRVC offer a growing selection of online and hybrid classes, making higher education more accessible to a larger number of students. Online classes are taught almost exclusively through the Internet requiring students to attend very few face-to-face meetings. Hybrid classes use a combination of class meetings and online instruction. To find out more about online classes, visit www.dvc.edu/online.

DVC summer programs

Full and short-term classes 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.
San Ramon Valley Center

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

Many students take all of their classes at the San Ramon Valley Center, while others enroll in classes at both the San Ramon and the Pleasant Hill locations. The San Ramon Valley Center is located in the Dougherty Valley adjacent to the Dougherty Station Library and Community Center. SRVC provides an opportunity for DVC students to receive the same excellent instruction in an intimate setting.

The San Ramon Valley Center offers a full complement of general education courses that meet associate degree requirements and/or transfer to a four-year institution. In addition, SRVC offers Computer Information Systems (CIS) A.S. degrees and certificates in the latest software and network technology areas. Note: SRVC class offerings are listed in the print schedule, following the Pleasant Hill sections for each class, under the heading San Ramon Valley Center. The online schedule lists classes offered at both locations, by course. Those taught solely at SRVC can be searched separately.

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

SRVC is located at 1690 Watermill Road in San Ramon. The telephone number is listed in the telephone directory in the back of the catalog. SRVC’s website is www.dvc.edu.

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 class 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 submit their application for admission. At this point, students sign up for Counseling 095 orientation. Once they have completed assessment and Counseling 095, 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 fewer, or are enrolling:

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

**Assessment**

After submitting the application, the next step is to sign up for English and math assessment testing. Please refer to the Assessment Center website for testing times, sample tests, and current policy. 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, lower level, next to the Information Center at the Pleasant Hill Campus and in the East Building, rooms 161 and 164 at the San Ramon Valley Center.

Please refer to the Assessment Center website for testing times, sample tests, and current policy www.dvc.edu/assessment.

**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 095. This course consists of two three-hour class sessions or an all-day Saturday session. The course is taught by a counselor who provides information about DVC academic and career/technical programs, special programs, support services, and career opportunities. The counselor also discusses general education patterns and transfer requirements, degree and certificate requirements, grading, and add/drop policies.

In Counseling 095, students also meet individually or in small groups with a counselor to plan their first-term courses and to begin working on a larger educational plan. The student and counselor review the student’s goals, prior course work, and assessment test results.

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

**ADMISSION**

**Who is eligible for admission?**

A student is eligible for admission if he or she:

- has graduated from high school, or
- is 18 years of age or older and is 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. More than 1,000 international students representing 64 countries attend DVC yearly. The diverse cultures of these students help to enrich our campus community. International students interested in applying to DVC can download and print out the application from www.dvc.edu/international. 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-checklist. 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 International Student Admission and Services (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.

HOW TO APPLY

General applications

New and returning students
All students who are new or who have been absent for more than one academic year are required to file a new application for admission with the Admissions and Records Office. Go to www.dvc.edu and click on “Apply Now Online.”

Transcripts
Students should send their official transcripts to the Admissions and Records Office if they plan to use their prior course work to satisfy a degree/certificate requirement or a transfer curriculum’s general education requirements. Official transcripts are also needed to verify units completed and GPA for various financial assistance programs and when meeting with a counselor. These transcripts become part of the student’s official file and will not be released to the student or other colleges.

Programs requiring special application

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

FEES, COSTS AND REFUNDS

Enrollment fees*

California resident enrollment fees
California resident enrollment fee is $26 per unit.

Non-resident fees
Non-California resident students are charged $207 per unit ($181 per unit plus $26 per unit enrollment fee) if they are U.S. citizens or permanent residents.

Non-residents of the United States are charged $214 per unit ($188 per unit plus $26 per unit enrollment fee).

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 at the Pleasant Hill Campus and at the Admissions Office at SRVC.
For a full term-length class
In order to obtain a refund, students must officially drop units within the first two weeks of a term.

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

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 at the Pleasant Hill Campus or at the Admissions Office at SRVC.

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

Other fees and expenses

ASDVC discount sticker
Students may purchase an optional $8 ASDVC discount sticker to affix to their Connect Card entitling them to discounts for student related activities on campus and local merchants off campus.

Books, supplies, and course material fees
Students must purchase all books and many of the supplies required by their classes. 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.

Parking fees
Effective fall 2010 on the Pleasant Hill campus during the fall and spring terms, parking permits are $40 per term for automobiles, $20 per term for motorcycles and mopeds, and $1 for optional permit carriers. Daily parking fees are presently $2.00 per day, but will be raised to $3.00 per day as soon as the credit card option is operational. A two week notice will be provided prior to the implementation of the increase during the fall term and a credit card option will be available on the parking permit machines. Financial aid students are eligible for a discounted parking permit for $20. DVC permits are only required from 6 a.m. Monday morning until 5 p.m. on Friday and are valid at LMC and CCC. During the summer, parking permits are $3 per day for daily parking, $20 per term for automobiles, and $10 for motorcycles and mopeds.

Parking permits are not required at SRVC.

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 classes and catalog
Catalogs and class schedules may be purchased at the Book Center, or are available free online.

Student debts to the college
Students are expected 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 classes or obtaining official transcripts) until their debts are paid.

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.

Transcript fees
Students receive two official transcripts within the district free of charge. Additional copies are $5 each, payable in advance. A signature is required to release the transcripts. Transcript requests are accepted by mail, fax or in person. Fax requests must also include a VISA or MC number and expiration date. Please allow 7-10 working days for processing. Rush service is also generally available (24 hour service) for a cost of $10 per transcript.

Verification of enrollment fees
Students receive 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 (24 hour service) for a cost of $5 per verification.
Voluntary student medical insurance
Students may apply for insurance to cover 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 at the Pleasant Hill Campus, or in the West Lobby or Learning Commons at the San Ramon Valley Center. 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

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. Interested students should go to the Financial Aid, EOPS, or Scholarship Offices at the Pleasant Hill Campus for more information. In San Ramon, students can visit the West Lobby, the Learning Commons, or the Admissions Office. Students may also visit www.dvc.edu/financialaid.

Grants

Board of Governors’ fee 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
Complete a Free Application for Federal Student Aid (FAFSA) online at www.fafsa.ed.gov. Students may 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 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
Complete a Free Application for Federal Student Aid (FAFSA) online at 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
Complete a Free Application for Federal Student Aid (FAFSA) online at www.fafsa.ed.gov. Meeting the priority deadline of March 2 means that students will have priority for receiving the grant; however, applications are accepted as long as funds are available.

Notification
Eligible students are mailed an award letter.

Cal Grant
There are three main types of Cal Grants (A, B and C). Cal Grant A can be used for fees and tuition at four-year 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 career/technical 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
Complete 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. The GPA verification form is 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
Complete a Free Application for Federal Student Aid (FAFSA) online at www.fafsa.ed.gov. Meeting the March 2 priority deadline means that students will have priority for receiving federal work-study funds; however, applications are accepted as long as funds are available. To inquire about or apply for Federal Work Study (FWS), please come to the Financial Aid Office.

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 Free Application for Federal Student Aid (FAFSA) application, 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
Complete a Free Application for Federal Student Aid (FAFSA) and a Loan Request Packet. Loans are approved on a case-by-case basis.

Notification
Students are notified by the Financial Aid Office.

Other aid and benefits

Child Development Training Consortium 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. Textbook loans, tutoring, 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 have been established for DVC students by local, state, and national organizations as well as by individual sponsors. Call the Scholarship Program Office for more information. See the telephone directory in the back of the catalog. DVC Scholarships are made available through the generous donor contributions to the DVC Foundation.

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 following 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 located next to the Information Center in the Student Services Building, or in the Learning Commons at SRVC 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 them 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. Veterans and/or their dependents receiving benefits must schedule a one hour counseling appointment to create or update their VA Educational Plan. Students who have attended other colleges must first submit official transcripts to the DVC Admissions and Records Office prior to their counseling appointment. Veterans/dependents are encouraged to meet with their counselor at least once per semester.

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.

Department of 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 (DOR) may provide assistance to students eligible for Department of Rehabilitation support.

Eligibility
Students with disabilities that interfere with their ability to work may be eligible for DOR aid.

How to apply
Visit the WorkAbility III Office to make an appointment with a DOR counselor. The telephone number is 925-685-1230 ext. 2080.

REGISTRATION FOR CLASSES

Adding, dropping, and enrolling in classes
Students are responsible for managing their enrollment. A registration receipt is proof of enrollment. Students are also responsible for officially dropping classes. DVC does not permit auditing. Registration can be done online or over the telephone and there is no fee to register. See the schedule of classes for registration dates and times.

Schedule of classes
The schedule of classes is a list of DVC’s class 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 automatically assigned and 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. Registration appointments can be viewed on WebAdvisor at www.dvc.edu.
New students
New students must complete the application and assessment process and sign up for an orientation/ advisement course, Counseling 095. Once Counseling 095 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 095. 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 more than one academic year 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/webadvisor.

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 classes 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 classes. All class fees are due at the time of registration. There is no fee for using the online or telephone registration system.

Walk-in registration
Students registering in person should decide which classes to take and complete a Schedule Request Form and, if necessary, an application. Students should have alternative classes 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 classes.

Special admit students
(concurrent enrollment)

High school students
High school students may enroll as special admit students with the permission of their principal and parent. These students must submit a DVC application (new students), a DVC Special Admission Recommendation Form (each semester of attendance), and pay the required fees when they register. Enrollment fees only are waived if the student is enrolled in fewer than 12 units. All high school (special admit) students must register in person for classes. Sophomores and below must also have approval of the DVC instructor before they are allowed to register in person. High school students who desire to enroll in more than 11 units must get permission from the superintendent of their school district and the president of DVC.

Four-year colleges
DVC’s concurrent enrollment program allows students to take some of their classes 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 coursework 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 F-1 status. Authorization to be below 12 units must be granted by a designated school official in the International Students Admissions and Services Office.

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

Adding classes after instruction begins
Late add codes
The late add code is a four-digit number that is given to students by the instructor at 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 class.

Students who wish to add classes 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 also go to the class to get the instructor's signature. Students must return the signed Schedule Request Form to the Admissions and Records Office, and pay all fees to enroll in the classes.

Dropping classes

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

Students who do not officially drop a class may receive an “F” for the term. Add/drop forms are available in the Admissions and Records Office. To officially drop a class, 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 class has been dropped from their records by checking their schedule. Students are advised to print a copy of their schedule.

If students drop a class before 25 percent of the instruction time has elapsed, no grade will appear on their transcript. If a student misses the first meeting of a class, the student may be dropped by the instructor. Any student who is absent the equivalent of two weeks of a term-length class 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.

Instructor’s withdrawal option
Students who miss the first meeting of a class may be dropped by the instructor. Any student who is absent the equivalent of two weeks of a term-length class 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.

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 positive picture identification and an original permission note or release form 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 (24 hour processing time) is available for in-person requests.

Correcting academic transcripts
See “Grade policy” in the “College policies and procedures” section.
STUDENT RESOURCES
See the directory in the back of the catalog for telephone extensions.

Assessment Center
ext. 2545
ext. 5135 San Ramon Valley Center

After new students submit an application for admission, they will need to have their math and English skills evaluated at the Assessment Center. Students may take their Assessments on a drop-in basis throughout the year. By taking the Assessment, students may be placed into the recommended chemistry, English, ESL, or math course. The Assessment Center is located in the Student Services Center, lower level, next to the Information Center at the Pleasant Hill Campus and in East Building, rooms 161 and 164 at the San Ramon Valley Center. Call first to check for hours or visit us at our website: www.dvc.edu/assessment

Book Center
925-682-7363
925-875-9565 San Ramon Valley Center

Students may purchase new and used textbooks, general books for recreational reading, backpacks, school supplies, bus passes, computer software, food, and personal items at the Book Center. Visa, MasterCard, Discover and ATM cards are accepted. Sorry, no checks are accepted. Textbooks may be ordered through the DVC website at www.bookcenter.dvc.edu. With a student ID card and activity fee sticker, there is a three percent discount on most items.

Career and Employment Services
DVC’s Career and Employment Services office is located on the first floor of the Student Services Center adjacent to the Information Center, the Assessment Center, CalWORKs and the WorkAbility III Program. Career and Employment Services provides students with tools to find immediate employment and internships, facilitates enrollment in Cooperative Work Experience Education (units for current employment), and volunteer services, and provides a spacious, comfortable environment to explore the latest information related to careers and employment opportunities. Career and Employment Services holds monthly office hours at the San Ramon Valley Center. To schedule an appointment in San Ramon, please call 925-866-1822 ext. 5106.

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 coordinated services for child care, work study, job development/job placement assistance, and personal and professional development. 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 to optimize academic success.

Career and Employment Center
ext. 2206 or 2435

The Career and Employment Center offers many career and job related resources to students, alumni, faculty, staff and local community members. Our center has ten computer workstations with ample space for students to research careers and occupations, and draft career related documents such as resumes and cover letters. Highlights of the center include:

- access to an online job site to locate part-time, full-time, volunteer and internship positions;
- appointments to assist with resume and interview preparation;
- career and employment center website with free access to career related resources;
- career counseling to help define career objectives;
- library of employment preparation materials;
- announcements regarding local job fairs, seminars, and employment open houses and workshops;
- annual job fair held every spring.

For more information, visit the DVC career website at www.dvc.edu/career.

Cooperative Work Experience Education
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 job or internship.
**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:**
- develops employability skills through achieving established learning objectives/goals;
- expands professional networks that can assist in a future job search;
- provides an opportunity for achieving new learning on the job by defining objectives/goals;
- enhances self-management and employability skills;
- 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 website at [www.dvc.edu/coop](http://www.dvc.edu/coop).

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**Volunteer Certificate Program**  
dept. 2579

DVC’s Volunteer Certificate program encourages and recognizes students who are interested in volunteering off campus. Students participate in off-campus service opportunities that address community-identified needs or opportunities that facilitate academic, personal and/or civic growth.

**As a volunteer, students will:**
- promote civic responsibility and personal pride;
- gain experience in academic or future career field while making a difference in the lives of others;
- use surrounding communities as part of the classroom for learning;
- enhance university and scholarship applications;
- develop meaningful relationships within the community;
- expand professional networks;
- increase cultural awareness and appreciation of diversity.

For more information, visit [www.dvc.edu/volunteer](http://www.dvc.edu/volunteer)

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**WorkAbility III Program**  
dept. 2080

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.

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**Contra Costa County Office of Education - Transition Program**  
dept. 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.

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**Child care**  
dept. 2316

Daytime child care programs, for children ages 5 months to 5 years, make attending classes more convenient for many students. For information about times, fees, and parent responsibilities, contact the Developmental Children’s Center Office.

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**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 Valley Center. See SRVC student services for details.

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**Computer Center**  
dept. 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.

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**Counseling Center**  
dept. 2276/2278 or dept. 5110 San Ramon Valley Center

Counselors work with students to help them set goals and design plans for achieving those goals. The advisement/orientation courses, Counseling 095 is an important element to begin this process. Counselors provide career, educa-
tional, 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 at the Pleasant Hill Campus and in the West Lobby at the San Ramon Valley Center and include:

- information on transfer, associate degree, and certificate programs;
- the Transfer Center and its resource library;
- career planning, transfer and college success courses;
- personal counseling;
- individual and group counseling;
- 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 half-hour appointments for educational planning. Express counseling, a limited five to ten minute drop-in visit, is available daily.

**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](http://www.dvc.edu/dss) or call the Sorenson Video Relay number 925-270-1660. To arrange an appointment with a DSS counselor, contact the Counseling Center at ext. 2276 or 2278 or ext. 5110 at SRVC.

**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 with proof of current registration and picture identification. 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 Valley Center in the West Lobby.

**Emergency services**

ext. 2339/2338 or 5120 ext. 5120 San Ramon Valley Center

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 Pleasant Hill Campus has 14 code blue emergency telephones located on campus grounds and in the parking lots enabling direct contact with Police Services. For more information and safety tips visit [www.4cd.net/police_services](http://www.4cd.net/police_services).

**English as a Second Language (ESL)**

The English as a Second Language program consists of a three-level core course sequence and five supplemental courses. At each level of the core sequence, one course develops students’ reading skills and one develops their writing skills. The supplemental courses focus on various topics such as pronunciation, listening, conversation and grammar.

In order to select the appropriate classes, ESL students should take the CELSA assessment at the Assessment Center, located in the Student Services Center. Students can find information about registration and admissions at the Information Center, also located in the Student Services Center. More specific information about English tutoring and ESL courses is available at the Learning Center, across from the Counseling 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)**

The EOPS program is designed to help low-income and educationally disadvantaged students have a successful college experience and complete their educational and career goals. EOPS provides comprehensive support services including EOPS orientation, academic counseling, one-on-one and group tutoring, priority registration, 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 Career 110, and parent study-time child-care grants for students who are not eligible for the CARE program (when
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 (exceptions may be made for those with a documented disability), have less than 70 degree applicable units, 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 recipients of CalWORKs/TANF and are single parents with children under 14 years of age. The objective of the program is to help students complete college-level studies and educational programs by providing additional services above and beyond what is provided by EOPS. 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 and lunch 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 Advanced Technology Center and Life Health Science Building, 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.

Note: Debit cards are now accepted at the Cafeteria, the Basement Cafe, the Crow’s Nest, and to pay for DVC food service catering.

DVC Bakeshop
ext. 2556/2225
Located in the northwest corner of the Quad by the Cafeteria, the DVC student operated bakeshop offers fresh-baked breads, pastries, breakfast items, and desserts prepared daily from scratch by culinary arts students. The Bakeshop is open Monday through Thursday from 8 a.m. to 1 p.m. during the spring and fall terms. Special orders are available upon request.

DVC Culinary Arts on-campus catering
ext. 2555
Catering for groups, including box lunches, special events, department meetings, custom banquets, and buffets is offered by the culinary arts students. On-campus catering is offered during spring and fall terms.

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 terms.

Norseman Restaurant
ext. 2300
Located adjacent to the Cafeteria and operated by culinary art students, the Norseman is open to students, faculty and the community for fine dining at affordable prices. For a gourmet lunch, featuring cuisine from around the world, join us at DVC’s own restaurant. Call for operating hours, and to make reservations for lunch or special dinner series evening meals.

Note: The DVC Culinary Program makes a choice to GO GREEN with environmentally friendly disposables for all “to go” and delivered catering functions. This applies to DVC Bakeshop, DVC Culinary Arts on-campus catering, the Express Bar and the Norseman Restaurant.
Housing services
A bulletin board listing rooms for rent in nearby houses and apartments is located outside the Financial Aid Office and in the Learning Commons at the San Ramon Valley Center. 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 Office or in the Learning Commons at the San Ramon Valley Campus. Students can visit www.dvc.edu/student-life

Information Center
ext. 2578
The Information Center is a convenient location for students to learn about the services and programs available at Diablo Valley College. The Information Center staff can provide students with information about WebAdvisor online registration, the enrollment process, and other services that help students achieve their goals. The Information Center is located in the Student Services Center, first floor.

International Students Admissions and Services Office
ext. 2077
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 Room 210 of the Student Services Center, or go to www.dvc.edu/international.

Library services
The libraries, located at both the Pleasant Hill and San Ramon Valley locations, 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 and on the website 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;
- information commons with computers that provide access to electronic resources and the Internet;
- instruction: credit courses and workshops on library research skills;
- computer lab classrooms;
- student group study rooms.

Media Center/Audio-Visual
ext. 2254/2255 student services
ext. 2248/2249 faculty/staff services
The Media Center's collection contains over 4,000 videotapes, 1,200 DVDs, assorted CDs and audiocassettes, 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 class projects.

The Media Center/Audio-visual is located on the ground floor of the library building. www.dvc.edu/media.

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 in 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 Valley Center

Students at SRVC have access to many of the same services available at the Pleasant Hill campus including admissions, assessment, bookstore, career and employment services, computer labs, counseling, disabled student services, EOPS, financial aid and scholarship information, job postings, math, foreign language, reading and writing, and computer labs, library, orientation classes, student life and activities, 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. 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 merchants. Other services available include County Connection bus schedules, fax service, 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 and maintains outreach to the San Ramon Valley Center. The Transfer Center staff, working closely with the Counseling Department, 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 resources and services including:

- individual advising appointments with UC, CSU, and private college representatives here at DVC;
- workshops on application processes, writing an admission essay, and major selection;
- daily drop-in hours with DVC counselors;
- information on concurrent enrollment with UC Berkeley, Cal State East Bay, Mills College, and John F. Kennedy university;
- daily drop-in hours with DVC counselors;
- regular visits to the San Ramon Valley Center;
- information about choosing a college, 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 Transfer Day and application essay workshops. 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, select transfer 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. Students 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 understanding of course material. Please see the list of services below and check the schedule of classes for specific locations. 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/campuslabs. 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 classes for hours or visit www.dvc.edu/tutoringservices and select “English Tutoring Lab” to download free English handouts and more information.

EOPS offers tutoring in a variety of basic skills subject areas. EOPS offers one-on-one tutoring in a variety of subject areas to EOPS students. Please contact the office of EOPS directly to learn more.

Foreign Language Tutoring Lab offers tutoring on a drop-in basis in Arabic, Chinese, French, German, Italian, Japanese, Persian, Russian and Spanish. Location: BFL-211. Hours are posted outside BFL-211.

Foreign Language Computer Lab offers computer access and drop-in assistance with lab assignments in all nine languages offered by the Foreign Language Department: Arabic, Chinese, French, German, Italian, Japanese, Persian, Russian and Spanish. Location: BFL-213. Monday - Friday schedule are posted outside the lab.

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. A math instructor and student tutors are available. The Math Lab also offers group and by-appointment tutoring for selected classes. The Math Lab is located on the second floor of the Learning Center Building. Please visit www.dvc.edu/org/departments/math/mathlab for more information.

San Ramon Valley Center offers tutoring in biology, chemistry and reading and writing (across the curriculum). Please contact SRVC Office of Student Services for a current schedule and location.

EXTRACURRICULAR ACTIVITIES

Student activities

Associated Students of Diablo Valley College (ASDVC) - student government
www.asdvc.org
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 College Council and other shared governance committees and councils.

In addition to serving on college committees and councils, the ASDVC has its own committees to achieve their goals. These committees are open to all students. For meeting times, visit www.asdvc.org

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 11 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 the dean of P.E., athletics and dance. www.dvc.edu/athletics.

Men’s teams
Men compete in baseball, basketball, football, swimming and diving, and water polo.

Women’s teams
Women compete in basketball, soccer, softball, swimming and diving, 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 an online news site and a biweekly print issue each semester. These Inquirer staff members hone their leadership, communications and multimedia skills while learning the many jobs it takes to produce an online and print publication. They gain valuable professional training, whether they work as reporters, editors, photographers, videographers, graphic artists, page designers or advertising and business managers. Many of them transfer to four-year schools and pursue careers in journalism. For more information, contact the Inquirer at inquirer@dvc.edu or visit the newsroom in Humanities 102. See telephone directory in back of catalog. The Inquirer is online at www.theinquireronline.com.

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 in the Student Life Office, the Student Services Office at the San Ramon Valley Center or at: www.dvc.edu/student-life

Cultural activities

College art
DVC is continuing to develop an outstanding, permanent collection of student artwork. Each year art pieces are selected and purchased from DVC student art exhibitions. The art collection is displayed and rotated throughout the college to improve the college’s visual environment with quality art.

Art collections
The Art Department, in conjunction with the campus administration, has established three art collections: the permanent art collection featuring works by acclaimed artists, the faculty art collection, and the student art collection. Works from these art collections are installed throughout the campus.

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

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

Campus performances

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

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

Music performances
Each term our Music Department presents a series of afternoon and evening concerts, many of which are free. DVC ensembles include the Masterworks Chorale, Concert Choir, Chamber Singers, Philharmonic Orchestra, Wind Ensemble, Symphonic Band, Chamber Ensemble, Piano Ensemble, Jazz Ensemble, Jazz Combos, Vocal Jazz Ensembles, and the Night Jazz Band. These groups perform on campus and throughout the state in concert, and at clubs and festivals. For more information go to the Music Department webpage at www.dvc.edu/music or contact the Music Department at 925-685-1230 ext. 2456.

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

Theater productions
DVC drama produces a season of five plays each year, including at least one musical theater production, utilizing the Performing Arts Center and the intimate Arena Theater. The year-round Children's Theater Program produces a number of plays for youth and tours local K-12 schools. Each spring student directors produce a Brown Bag series of short plays and one-acts and each summer the Drama Department offers a six-week drama training program. For more information, go to the Performing Arts Department web page: 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. Reservations must be made ahead of time. There is an admission charge of $2 per person. The planetarium is located next to the Physical Sciences 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 planing, sealants, fluoride application, and teeth whitening. These services are provided at a reduced standard fee. Contact the dental hygiene clinic at ext. 2356 located in the Life and Health Sciences Building for an examination appointment.

MORE EDUCATIONAL PROGRAMS

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

Career pathways for high school students
Career Pathways are a sequence of courses that provide students with real-world application of studies, preparing them for a chosen career area. Diablo Valley College supports 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 path 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).
Articulation agreements between high schools and DVC save students time and money by allowing them to earn college credit while attending high school.

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 grades. The activities take place on the DVC and SRVC locations 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.

Special workshops are designed to teach parents and students about the college admissions and financial aid processes. The program offers test preparation strategies and assistance in preparing students for college entrance exams. Eligible students are provided with fee waivers to cover the cost of SAT and ACT college entrance exams as well as admissions applications. Students can receive assistance with study skills, time management, goal setting and self-esteem development. [www.dvc.edu/ets](http://www.dvc.edu/ets).

**Emeritus College**

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 nine locations in Lafayette, Moraga, Pleasant Hill, Rossmoor and Walnut Creek.

Emeritus College offers lectures, educational travel ([www.travelearn.com/diablo](http://www.travelearn.com/diablo)), concerts and other special events. To join the mailing list, please call ext. 2041. The Emeritus College office moved to the DVC campus as of the first of the year 2010. Class schedule is also posted on the website: [www.dvc.edu/emeritus](http://www.dvc.edu/emeritus).

**Learning communities**

Colleges across the country have found that students in Learning Communities are more connected with their classes, teachers, and fellow students. Students in a Learning Community enroll 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 class sections within a specific Learning Community, unless otherwise noted.

Students enhance their time at DVC by experiencing an innovative curriculum, academic and personal support, and the opportunity to make friends with a variety of people by sharing an enriched common educational experience.

Find out more about a specific learning community under the Learning Communities heading in the class listing section of the printed schedule.

**CARRERA (CAReeR Exploration and Readiness Academy)**

DVC’s CARRERA is a learning community designed to help students find the career that is right for them while building basic English and math skills necessary for their success. Students must participate in an orientation workshop and will enroll in 12 units of coursework best suited to their skills. Math and English assessments are required. For more information about orientation and enrollment for this exciting new program, please call 925-685-1230 ext. 1888 or email [CARRERA@dvc.edu](mailto:CARRERA@dvc.edu).

**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 recent 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. Students must participate in an orientation and screening process to be considered for enrollment. For more information about orientation and enrollment, please call 925-685-1230 ext. 2162 or visit the ECE PDP office in FL-202.

**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.

**Ujima program**

Ujima offers opportunities for students to learn college success strategies and prepare for graduation and transfer. This innovative program focuses on the African American experience and supports students through a student success course and cultural enrichment activities. The Ujima Program is open to all students.

**Participants in the Ujima program will:**

- develop critical thinking and problem-solving skills that will facilitate adjustment to college environment;
- participate in service learning projects;
- develop effective behavior patterns through self-examination;
- attend cultural and social events, field trips, and college tours;
- enhance motivation, discipline, time management, and resource utilization.

For more information, stop by the Ujima Office, Room 209 in the Student Services Building or call 925-685-1230 ext. 2417.

**Relations with Schools Office**

The Relations with Schools Office coordinates student outreach efforts with local schools and community groups. The office offers information about DVC programs and services and also provides campus tours to prospective students and their families. To learn more about the services available, call 925-685-1230 ext. 2561, or 925-866-1822 ext. 5135 at the San Ramon Valley Center.

**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.

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.

**ACADEMIC/INSTRUCTIONAL POLICIES AND PROCEDURES**

**Academic policy**

Students are expected to attend all class meetings, regardless of whether or not the instructor takes attendance. Students who miss more than two weeks of a term-length class may be dropped by the instructor. Students must contact the instructor directly to inform them of an absence. The college cannot relay such messages.

**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 class. 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 10 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.

Complaints about staff, managers or faculty
Individuals who are unable to directly resolve an issue with any classified staff member or manager and wish to complain may contact that employee's supervisor to notify them of the issue and to seek appropriate resolution.

Individuals who are unable to directly resolve an issue with any faculty member and wish to complain may contact the appropriate department chair, whose responsibility it is to listen to student inquiries, complaints and grievances about department members and matters. The department chair will investigate and attempt to resolve matters on a department level. If the faculty member is also the department chair, direct the concerns to the academic dean.

Course requirements and credit

Course work and units

Course work and study time per unit
Units of credit are a measure of the amount of study performed in a course; grades are a measure of the quality of that study. Generally speaking, for each three-unit lecture class, 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 the start of the class. Students may request to exceed unit limits through the counseling website under the forms category.

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

**Exemptions**

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

**Variable-unit courses**

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

**Repeating courses**

If the student has received a satisfactory grade in a course that is not listed as repeatable, he or she may repeat the course only after a significant lapse of time (three years) or under extenuating circumstances. Students must appeal to the dean of outreach, enrollment and matriculation, prior to repeating the course. This appeal may be made online at [www.dvc.edu/petition-to-repeat](http://www.dvc.edu/petition-to-repeat). If permission is granted, the new grade will appear on their transcript and the higher of the two grades may be calculated in their grade point average.

**Repeating courses with substandard grade**

Students who have received a substandard grade in a course should see the “improving a grade point average” section of this catalog.

**Independent study courses**

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

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

**Deadlines**

Independent study forms must be submitted for approval to the division dean before the sixth week of the term.

**Adding and dropping classes**

Classes 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 classes” section of this catalog.

**Auditing of classes**

Diablo Valley College does not permit auditing of classes. 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 be successful. 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: Dropping a class with a co-requisite will result in a drop from both classes.

Usually a prerequisite is a course from a lower sequence of courses. For example: Students 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 see the individual course offerings in the catalog.

**To register for a course with a prerequisite**

Students who have completed the prerequisite course with a “C” grade or higher, at DVC fall 1999 or later, will have the prerequisite automatically cleared upon registration. If the prerequisite course was completed at DVC, CCC or LMC prior to fall 1999, contact the Admissions and Records Office.

If the prerequisite course was completed at another educational institution, the Admissions and Records Office must clear the requirement prior to registering either online or by telephone.

All prerequisite forms must have the appropriate documentation attached.

**Online or telephone registration**

There are two ways to do this:

1. submit an unofficial or official transcript with a prerequisite form to the Admissions and Records Office;

OR
2. fax an unofficial transcript with a prerequisite form.
If approved, the prerequisite will be cleared within two to three business days. If denied, the student will be notified.

In person registration
Students may submit an official or unofficial transcript along with a prerequisite form at the time of their registration appointment and register in person.

Prerequisite and/or co-requisite challenge
Students who are denied enrollment in a class 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 class. If space is available, the student will be enrolled in the class pending the outcome of the challenge.

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

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.

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, 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 test score(s) must be sent to the Admissions and Records Office and a request made for this examination credit to be posted to the 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 Calculus 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.

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 college to which they plan to transfer for information on how these examinations can be used to meet admission, general education, and major requirements.

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

2. CLEP
Students may petition the Admissions 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.

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

3. Credit by exam
Students may earn credit through examinations available through DVC academic departments. These examinations 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 submit a “Petition for Credit by Examination” form, available from Admissions and Records Office and division offices, to the department chair at least six weeks before the end of a fall or spring term. The department chair approves or denies the petition within five days and returns the form to the student. The student submits the form and pays the course fee to the Admissions and Records Office. They will forward the form to the department chair. Arrangements for administration of the examination will be made by department faculty. The examination itself may take any appropriate form such as written, oral, portfolio, demonstration, or a combination of methods.

In addition:
• The student should not already have taken the course or attempted an examination in the course, whether at DVC or elsewhere.
• A maximum of 12 units toward an associate degree or six units toward a certificate may be earned by courses for which credit has been earned by examination.
• Credits earned by examination cannot be used to satisfy the 12-unit residence requirement for the associate degree.
• The student’s academic record shall be clearly annotated to reflect that credit was earned by examination.
• A student may only petition to take the examination once.
• 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 examination equivalent to the enrollment fee for the class.

Grading shall be according to the regular grading system. If a student passes the examination, a grade is recorded on his or her permanent record with the notation “credit by examination”. If a student fails, that failure is recorded on the permanent record and the student is not allowed to take the examination again. Substandard grades may be remediated by enrolling in
the course. The petition form is retained in the student’s permanent file.

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

- Administration of Justice - ADJUS 120, 121, 122, 130, 221, 222, 230, 260
- Architecture - ARCHI 119, 126
- Art Digital Media - ARTDM 110
- Business Accounting - BUSAC 110
- Construction - CONST 135
- Education - EDUC 120
- Engineering - ENGIN 119, 126
- Music - MUSIC 122, 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

On occasion students, because of their disabilities, are unable to complete a course required of DVC’s associate degree or certificate programs. Those wishing to apply for a course substitution should review the college’s complete course substitution policy. This policy is available in the Disability Support Services (DSS) Office located in the Student Services Center SSC-202. To initiate an application, please make a counseling appointment with a DSS counselor by calling 685-1230 ext. 2276.

DVC is “a drug-free” campus

The DVC Student Code of Conduct prohibits the possession, consumption, sale, distribution or delivery of any alcoholic beverage in college buildings or on college grounds, or at college-sponsored or supervised activities, regardless of their location, unless authorized by college officials. The code also prohibits the use, sale, distribution, or possession on campus of, or presence on campus under the influence of, any controlled substances, as listed in Schedules I through IV of Section 202 of the Controlled Substances Act (21 U.S.C. Section 812) on district property or at any district-sponsored event. This includes student participation in field trips, athletic competition and/or any activity sponsored by the college. Any violations will be cause for disciplinary action up to and including expulsion. For additional information about the health risks associated with the use of illicit drugs and the abuse of alcohol, and the applicable legal sanctions under local, state or federal law, please visit: www.dvc.edu/policies/alcohol-drugs. 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. For more information about the sexual harassment policy, please see: www.dvc.edu/policies/harassment and for more information about equal opportunity policies and procedures, please see: www.dvc.edu/eeoc.
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
Vice president of finance and administration (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 section 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 5 (Sec. 51300-51325), and the Contra Costa Community College District Board Policy 4001.

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

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
</tr>
<tr>
<td>C</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>D</td>
<td>Passing, less than satisfactory</td>
</tr>
<tr>
<td>F</td>
<td>Failing</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>Grade points per unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Incomplete</td>
</tr>
<tr>
<td>P</td>
<td>Pass</td>
</tr>
<tr>
<td>NP</td>
<td>No Pass</td>
</tr>
</tbody>
</table>

The following are non-evaluative symbols:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade points per unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>Withdrawal</td>
</tr>
</tbody>
</table>
for a P/NP grade. Students must complete a form in the Ad-
missions 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 class (or 25 percent of the term for shorter classes) 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. These grades are not used in the calculation of grade point averages, although the units for P grades are applied toward the 60 required for an associate degree. Four-year colleges and universities often accept credit earn- ed on non credit applicable courses as the amount of homework, the kind and frequency of evaluations; and have them submit a grade correction form. The instructor must notify the Admissions and Records Office. The instructor must notify the Admissions and Records Office.

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

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

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

Pass/no pass grades (P/NP)
These grades are not used in the calculation of 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 refer to the policies of the college to which they intend to transfer. P/NP grade option cannot be reversed after 25 percent of the class 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 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 class 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 classes. 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, 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 class 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 pass (P) or no pass (NP). Pass/no pass 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 instruction, 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 class, 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 next step is for the student to meet with the department chair, who will attempt to mediate the issue. If the department chair is unable to achieve settlement, the next step for the student is to meet with the division dean, who will attempt to mediate the issue. The mediation effort shall include a conference with the division dean, the department chairperson, the student and the faculty employee, if available, and/or individual or combined sequential meetings between the division dean and the department chairperson, the student and the faculty employee, if available. The student may have a representative present in either event. If the issue is not resolved to the satisfaction of the student, the division dean should prepare a written summary of the mediation efforts and forward it to the vice president of instruction for the continuation of the appeal process.

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 instruction, 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 instruction, 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 instruction 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 mem-
ber, they should advise the vice president of instruction 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 instruction, 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 instruction 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 office of the vice president of instruction.
   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/petition-to-repeat. Under no circumstances may a student repeat a course more than two times to alleviate a substandard grade (Title 5, section 55042).

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 24 units of substandard grades (“D,” “F,” or “NP”) excluded (without the student having to repeat the course) from their grade point averages. To be eligible, students must have completed 20 units of satisfactory work (“C” grade or better) that has been completed within the Contra Costa Community College District or any other accredited college or university, since receiving the last substandard grade (the unit count begins the semester after the substandard grade is received). The student must not have received any “D’s,” “F’s” or “NP” since the substandard work (minimum 2.0 since substandard work). Students interested in academic renewal should request a petition from the Admissions and Records Office (Title 5, section 55046) and must have a counselor sign the form before submitting it to the Admissions and Records Office.

Instructional material policy

Students enrolled in credit or non credit courses and programs may be required to provide certain instructional and other materials including, but not limited to textbooks, tools, equipment and clothing. A “materials fee” may be charged if the instructional and other materials are used in the production of an ‘end product’ that has continuing value to the student outside the classroom setting. Excerpted from Board policy 5017.

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. Title 5 Section 55530(e).

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. Title 5 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 095) 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 per semester 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;
- 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 and matriculation and complete an “appeal or request for waiver” form or file a complaint regarding matriculation rights.
   b. The dean or designee may contact the student and schedule a meeting to discuss the problem and/or inform the student of the decision.
   c. In the event that the appeal or request for waiver is not granted, the student will be advised of his/her rights to further appeal and the correct procedures to follow.

2. Appeal to the vice president of student services or designee.
   a. If the initial appeal or request for waiver is not granted and the student does not accept this decision, the student may submit the initial form to the vice president of student services for further review.
   b. The vice president of student services or designee will review the appeal and may meet with the student if deemed necessary.
   c. The vice president of student services or designee will inform the student of the decision concerning the appeal or request for waiver.

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

Parking policy
All parking requires a parking decal or a daily permit, which must be displayed on the student’s vehicle. Parking permits are required 6 a.m. Monday through 5 p.m. Friday. 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. Parking permits are not required at the San Ramon Valley Center. For more information, contact police services, or visit www.4cd.net/crpa/pd.

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 view the short probation video in the Media Center and 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 terms.

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,” “F,” “NP,” “P,” “NP”...
“IP,” or “RD”). Students on stage one probation will be encouraged to view the short probation video in the Media Center and 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 terms.

**Appeals and readmission**

Students who are placed on probation or dismissal are notified in writing. The notification includes the process for appealing the dismissal to the dean of student life or SRVC senior academic/student services manager. Dismissed students who wish to appeal their dismissal status must watch a brief video (located in the Media Center or the Learning Commons at the San Ramon Valley Center) explaining the probation process and file a “request for reinstatement” form with the dean of student life or SRVC senior academic/student services manager. 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. Students who wish to appeal their dismissals 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. For more information about the sexual harassment policy, please see: [www.dvc.edu/policies/harassment](http://www.dvc.edu/policies/harassment).

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

**Smoking policy**

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

At the Pleasant Hill campus, smoking is allowed only in the parking lots. At the San Ramon Valley Center, smoking is allowed only in the student parking lots. Restrictions at other educational sites are established by those sites and by state and local law.

Adherence to the restrictions relies on the initiative of non-smokers to politely request that smokers comply and on the courtesy of smokers to acknowledge the restrictions and comply. Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the Governing Board is a violation of the Student Code of Conduct and is punishable by disciplinary action. State law also prohibits smoking within 20 feet of all doorways and windows. Smoking generally means inhaling, exhaling, burning or carrying any lighted cigar, cigarette or pipe.
Student Code of Conduct - Student Services Procedure 3027

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

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

A. “Student” shall mean all persons enrolled in any courses at the colleges in the district, regardless of where courses are taught, whether they are enrolled fulltime or part-time, for credit or non credit or not-for credit or contract education, and whether or not s/he is planning to earn a degree, certificate of achievement or other certification. Persons who are enrolled in online or hybrid courses are also considered ‘students’. Persons who are not officially enrolled for a particular term, but who have been admitted to the college and enroll in courses from time to time, and have a continuing relationship with the college are considered ‘students’.

B. “Governing board” shall mean the Governing Board of the Contra Costa Community College District.

C. “District” shall mean the Contra Costa Community College District, including but not limited to its administrative staff and each of its colleges.

D. “College” shall mean a college operated and maintained by the district.

E. “Member of the college community” shall mean the district trustees, the academic, support staff, and administrative personnel of the district, the students of the district and any other person while on district or college property or at a district or college function or activity.

F. “Day” shall refer to a college instructional day unless otherwise noted.

G. “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 grounds 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 in online or hybrid courses, or at college sponsored events or programs, including but not limited to field trips, student conferences, debate competitions, athletic contests, club-sponsored events, and international study programs, regardless of location. Students shall also conduct themselves consistent with the Student Code of Conduct in any matter related to school activity or attendance. Students shall be suspended or expelled only for good cause.

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

1. Acts of academic dishonesty, including, but not limited to, cheating, tampering, fabrication, plagiarism, or assisting others in an act of academic dishonesty. Cheating is defined as unauthorized copying or collaboration on a test or assignment, or the use or attempted use of unauthorized materials. Tampering is defined as altering or interfering with evaluation instruments or documents. Fabrication is defined as falsifying experimental data or results, inventing research or laboratory data or results for work not done, or falsely claiming sources not used. Plagiarism is defined as representing someone else’s words, idea, 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 is defined as 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;

2. other forms of dishonesty, such as lying, knowingly furnishing false information, or reporting a false emergency to any college official, faculty or staff member or office or to the district;

3. forgery, alteration, misappropriation or theft, misuse of any district or college document, record, key, electronic device, or identification, including, but not limited to, unauthorized grade changes and forged signatures on official college forms.

4. misrepresentation of oneself or of an organization to be an agent of the district;

5. obstruction or disruption of teaching or the district’s educational process, administrative process, disciplinary procedures, or other district functions and activities on or off district property;

6. 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;

7. vandalism, graffiti, or other willful misconduct which results in cutting, defacing, or other damages to any real or personal property owned by the district or a member of the college community;

8. assault, battery, violence or threat of violence, or any willful misconduct which results in an injury or death of a student or district personnel or behavior that threatens the health and safety of any member of the college community;

9. theft of district property, or property in the possession of, or owned by, a member of the college community;

10. 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;

11. failure to comply with the directions of the district or college officials acting in the performance of their duties and/or failure to identify oneself to these persons when requested to do so;

12. 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;

13. 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;

14. 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;

15. engaging in lewd, indecent, or obscene behavior on district-owned or controlled property or at a district-sponsored or supervised function;

16. rape, date rape, sexual harassment, sexual assault, or threat of an assault upon a student or member of the college community on district property, or at a college or district-sponsored or supervised function;
17. unauthorized use of, or misuse of district property, including, but not limited to, unauthorized possession, duplication or use of district keys and/or unauthorized entry into district property;
18. willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the governing board or college;
19. knowingly assisting another person in the commission of a violation of the student code of conduct;
20. 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;
21. willful disruption of the orderly operation of the campus;
22. leading or inciting others to disrupt scheduled and/or normal authorized activities;
23. obstruction of the free flow of pedestrian or vehicular traffic on college premises or at college sponsored or supervised events;
24. unauthorized use of electronic or other devices to make an audio or video record of any person while on college premises without his/her prior knowledge, or without his/her effective consent when such a recording is likely to cause injury or distress. This includes, but is not limited to, surreptitiously taking pictures of another person in a gym locker room or a restroom;
25. any other cause identified as good cause by Education Code section 76033, not identified above; or
26. 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).
D. Nothing in these procedures shall preclude a student with a disability from receiving appropriate accommodations as identified by Disability Support Services.

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 or other special privileges 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:
Removal of a student from class by an instructor or 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 for up to three years.

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.
Revocation of degree or certification:
A degree or certificate awarded from the college may be revoked for fraud, misrepresentation, or other violation of college standards in obtaining a degree or certification, or for other serious violations committed by a student prior to graduation.

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

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

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

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

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

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

A. Procedures before the removal
1. The instructor shall notify the student of the instructor’s consideration of the removal from class and the reasons for the proposed removal.
2. The instructor may remove the student from the classroom immediately. Under normal conditions, the instructor should permit the student an opportunity to present a rebuttal to the accusation or otherwise offer relevant comment on the proposed removal. There need be no delay between the time notice is given to the student and the time of such a review.
3. The instructor shall decide whether or not to proceed with the proposed removal after hearing the student’s explanation and considering all of the information relative to the issue. There need be no delay between the time notice is given to the student and the removal.
4. The decision may be given to the student either orally or in writing.
5. The instructor’s decision is final and may not be appealed.

B. Procedures after the removal
1. Immediately following the removal, the instructor shall 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 three (3) 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 instruction 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 discipline. There need be no delay between the time of the notice given to the student and the time of the meeting. If the student fails to arrange a preliminary hearing (or if he/she fails to appear for a preliminary hearing he/she has arranged), the decision of the president’s designee will be final and not subject to a further Appeal Hearing.

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

H. Notice to the college president. The president’s designee shall report any disciplinary action imposed to the college president.

I. Notification after a suspension of more than five (5) days. If the president’s designee imposes a suspension of more than five (5) days, the president’s designee shall promptly send the student a letter of notification that is hand delivered or sent via certified mail to the student’s last known address. The notification shall include:
1. a statement of the charges, the reason for the suspension or recommended expulsion offer, and a description of facts related to the misconduct, including the evidence against the student, the date of the incident(s), time of the incident(s), and location of the offense(s);
2. a copy of the Student Code of Conduct;
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. The written request for an appeal hearing must be submitted to the president’s designee, and must cite the specific ground(s) for the appeal (from those listed below), and provides information which substantiates the ground(s) on which the appeal is being made;
4. Grounds for appeal - A student may appeal the decision of the president’s designee on grounds that:
   a. Fair consideration was not provided to the student, (i.e., there is evidence that some aspect of the hearing was prejudicial, arbitrary, or capricious).
   b. New and significant information, not reasonably available at the time of the initial hearing, has become available.
   c. The sanction or remedy imposed is not in due proportion to the nature and seriousness of the offense. Any evidence supporting these grounds must be included in the request for an appeal hearing.
5. 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;
6. the president’s designee may note that he or she will also recommend expulsion;
7. 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) business 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 serve as a neutral party.
   4. Alternate faculty, administrative, and student members shall be appointed to ensure that a standing committee can always be convened promptly.

XI. Appeal hearing procedures

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

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

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

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

E. A student may be accompanied by an advisor of his or her choosing, at the student’s request. The role of the advisor is passive in this procedure. The advisor may be present at the hearing and may counsel the 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 District governing board at its next regular meeting after the 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.

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

E. Within 30 instructional days of the receipt of the recommendation from the college president, and with the agreement of the chancellor, the District governing board shall conduct an appeal hearing in closed session with the accused student and the college president (or president’s designee).

1. The hearing shall be closed to protect the privacy and confidentiality of everyone involved, unless
   a. the accused student requests an open hearing, in writing, within 48 hours of being notified of the hearing, and
   b. it is determined that holding the hearing in open session would not lead to the giving out of information concerning students which would be in violation of state or federal law regarding the privacy of student records.

2. A closed hearing will be closed to everyone except the following:
   a. the student charged;
b. an advisor/advocate for the student charged, if so desired. If the student chooses to be accompanied by an attorney, the student must notify the district in writing of his/her intent to bring an attorney at least five (5) business days prior to the hearing. Failure to notify the district will result in a waiver of the right to be accompanied by an attorney, or a one month postponement of the hearing;

c. the college president and/or president’s designee;

d. the District governing board;

e. the chancellor and/or district legal advisor

f. the student’s parent(s) or guardian, if the student is a minor;

B. The accused student shall be notified in writing of the date and time of the hearing, and shall be provided with a copy of this policy. The notice shall be mailed via certified or registered mail, or served personally, if the student is a minor.

C. The hearing shall be conducted in accordance with the following procedures:

1. The president of the District governing board will serve as chair of the hearing, and will rule on all questions of procedure and admission of evidence.

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

3. Before commencement of the hearing, the District governing board shall review a description of the charges, notices, evidence, findings, and a copy of the proposed decision from the college-level disciplinary appeal hearing. The District governing board shall consider no evidence other than that evidence received in the hearing process.

4. The college president (or the president’s designee) shall make a brief statement to the District governing board, referring to relevant evidence regarding the alleged misconduct.

5. The accused student may then make a brief statement to the District governing board and present any relevant evidence.

6. The statements shall be limited to five (5) minutes.

7. Upon completion of these statements, the District governing board will have an opportunity to ask questions of both the student and the college president (or president’s designee).

8. The District governing board will conclude the hearing, dismiss the parties, and privately deliberate as to a decision.

9. The District governing board shall issue a statement of decision including findings of fact and a determination that the accused student did or did not commit the act(s) charged, a finding that the student’s act(s) did or did not constitute a violation of the Student Code of Conduct, and a decision as to whether the expulsion proposed by the president would be upheld or modified. The District governing board may also recommend further investigation. Pursuant to Education Code section 72122, regardless of whether the matter is heard in open or closed session, the final action of the District governing board shall be taken in open session, and the result of that action shall be a public record. The name of the student, however, shall not be released.

10. The Chancellor’s Office will send a written statement of the District governing board’s decision via certified or registered mail to the student’s last known address within three (3) working days of the hearing.

11. If the District governing board’s decision is unfavorable to the student, the student shall have the right to submit a written statement of his/her objections to the decision. This statement shall become a part of the student’s records.

12. The decision of the District governing board is final, and not subject to further appeal.

13. The hearing shall be electronically recorded. 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 of the recording at his or her own expense.

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/crpa/pd/docs/Campus Crime Awareness Report.pdf and www.4cd.net/crpa/pd/righttoknow.aspx.

OTHER POLICIES

Please check our website www.dvc.edu for a complete listing of all current DVC policies.

ACADEMIC CALENDAR

2010-2011

Please check our website www.dvc.edu/calendar and click on Academic/Calendar 10-11 for most current dates and a more complete calendar.

Summer term 2010

March 2 ..................... applications accepted
April 12 ..................... summer registration begins
June 14 - July 1 .............. 3 week session
June 14 - July 3 ............... 6 week session
July 6 - July 22 ............. 3 week session

Fall term 2010

March 2 ..................... applications accepted
May 3 ......................... fall registration begins
August 13 ................... first day of instruction
September 6 ................. Labor Day holiday
September 24 ............ Native American Day holiday
November 12 ............. Veterans Day holiday
November 25 - 26 ........ Thanksgiving holiday
November 27 - 28 ......... no classes
December 17 .............. last day of instruction
December 21-31 .......... winter recess

Spring term 2011

November 29, 2010 .... spring registration begins
January 24 ................... first day of instruction
January 17 ............... Martin Luther King Jr. Day holiday
February 18 ............... Lincoln Day holiday
February 19 - 20 ........ no classes
February 21 ............... Washington Day
April 18 -24 ................. spring recess
May 27 .................... last day of instruction
May 27 .................... graduation
Section two
TRANSFER INFORMATION

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TRANSFER INFORMATION

Many of our students transfer to a four-year college or university after completing lower division courses at DVC. DVC has consistently been among the community colleges that transfers the most students to the University of California and to the California State University systems. The secret of our students’ success is that they understand which transferable courses are required

- for admissions for their major
- for general education at their chosen four-year college.

The three part combination of requirements may be complex and necessitates that transfer students seek strong advising to be assured the courses in which they enroll meet all their transfer college’s requirements. Students are strongly encouraged to work with our counselors to plan their class schedules. This planning ensures that students complete needed courses at DVC in a timely manner and can reduce the time needed at the four-year college to attain a bachelor’s degree.

Each four-year institution has its own basic pattern of lower-division requirements regarding both general education and specific majors. CSU and UC applicants must also meet admission, major, prerequisite, and transferable unit requirements. These requirements vary from college to college and often change from year to year. Therefore, in addition to using counseling services, students are also encouraged to take advantage of information available in the Transfer Center, on college and university websites, in print materials, and from college representatives.

Transfer to the California State University (CSU)

To transfer as a junior to CSU, students must complete all of the following:

- at least 60 CSU-transferable units with a 2.0 grade point average (2.4 for non-residents)
- at least 30 of those units must be G.E. courses from the IGETC or CSU G.E. Breadth requirements (listed as General Education Options 2 and 3 in the Requirements section of this catalog).
- courses in Oral Communication, Written Communication, Critical Thinking and Mathematics/Quantitative Reasoning must all be completed with grades of “C” or higher. (Area A and B-4 from the CSU G.E. Breadth requirements or Area 1 and Area 2 from IGETC)

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 a 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
- Dental Hygiene 295
- Electricity 266, 267
- English 116 (transferable if taken prior to F ’05), 118 (transferable if taken prior to F ’05)
- Library Studies 100
- Mathematics 110, 110SP, 111, 114, 120, 120SP
Impacted majors
The term impacted means that the program usually attracts many more applicants than it can accept. Consequently, there are special requirements and selection procedures for admission. Sometimes entire campuses such as Cal Poly San Luis Obispo and San Diego State University are impacted and all majors there require more than the minimum requirements for admission.

Impacted majors at individual CSU campuses can vary from year to year. Some examples of impacted majors are business administration and nursing.

Students should refer to the specific CSU campus web site or www.assist.org or www.csumentor.edu for current information regarding impacted majors. Students are encouraged to meet with a counselor to determine if the major they are considering is impacted and what additional requirements are necessary to transfer.

CSU General education breadth requirements (CSU GE)
Completion of the pattern of courses listed as General Education Option 3 in the Requirements section ensures that students will have completed all of their lower division general education courses towards their bachelor’s degree at CSU. After a student has completed this pattern, he or she may request certification of its completion. With this certification, students will be responsible only for an additional nine upper division semester units in general education. Certification is not automatic and must be requested through the DVC Admissions and Records Office.

At the time this catalog went to press, CSU had not approved the G.E. list for 2010-2011. The information listed in the Requirements section is the list that was approved for 2009-2010 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.

Students may choose to complete the IGETC pattern of courses rather than CSU G.E. Breadth for CSU. This will have the same benefit as certification in CSU G.E. Breadth.

Reminder: Students must request that the CSU G.E. certification be sent to the four-year campus that they will be attending. Complete the CSU G.E. certification request form at the DVC Admissions and Records Office.

Intersegmental General Education Transfer Curriculum (IGETC)
The IGETC is a general education pattern that community college transfer students can use to fulfill lower-division general education requirements for the CSU or many colleges in the UC system without the need to take additional lower-division general education courses after transfer. It is designed for use by California community college students. Students who have attended a CSU, UC, independent or out-of-state college or university should consult with a counselor to determine if the use of IGETC is appropriate to reach their goal.

IGETC is not right 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 some schools or colleges within UC 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 higher before transferring, he/she will be subject to the regulations regarding breadth and general education requirements of the school or college of the campus to which he/she has been admitted.

The current list of courses approved for meeting IGETC is available in the DVC Counseling Center or at www.assist.org. See the pattern of courses listed as General Education Option 2 in the Requirements section of this catalog.

Reminders: Students must request that the IGETC certification be sent to the four-year campus that they will be attending. Complete the IGETC/CSU G.E. certification request form at the Admissions and Records Office.
Transfer to the University of California (UC)

To transfer as a junior to UC students must complete 60 semester units of UC transferable college credit with a grade point average of at least 2.4 (2.8 for non-residents) including:

- 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.

All of the above courses must be completed with grades of “C” or higher.

Course requirements vary from one UC campus to the next. Therefore, students should work with a counselor to formulate a strategy for completing a particular campus’s admissions requirements, major requirements, and general education requirements.

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. Contact a counselor for complete information.

Transferable courses

A listing of information on transferable DVC courses and UC credit limitations is available at www.assist.org or from the Counseling Center.

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 2.4 GPA admission requirement for UC transfers (2.8 GPA for non residents). Students interested in transferring to UC are urged to consult with a counselor as soon as possible in order to determine the current 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. Refer to the specific campus website for current information on impacted majors. Information is also available at www.assist.org.

UC special admissions programs (TAG agreement)

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 admission agreements offered by these campuses vary according to their requirements. Contact a counselor or the Transfer Center for complete information.

Transfer to independent (private and out-of-state) 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. DVC has articulation agreements with a limited number of independent colleges and universities in the area and out-of-state. These can be obtained through the DVC Counseling Center. To make transferring to an independent college or university or out-of-state institution as smooth as possible, students should contact the school directly early in their academic career. The Transfer Center can provide assistance with selecting a college and making contact.
DVC catalog 2010-2011

Section three

REQUIREMENTS

for associate degrees, general education, and certificate programs

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DVC ASSOCIATE DEGREES

DVC offers associate degrees in arts and science. These degrees are comprised of specific general education and other 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 courses. 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.  

Note: Only one of ENGL 116 or 118 may be applied to the associate degree.

Upper division coursework
Upper division coursework may be applied to meet IGETC and DVC general education requirements based on equivalency criteria. Official transcripts must be submitted to the DVC Admissions and Records Office. No units will be assigned; students are required to fulfill a minimum of 60 units in order to apply for the associate degree.

Meet with a counselor
It is very important to consult with a counselor before selecting courses. Counselors help students discover and examine all their available choices including petitioning for exemption from courses whose requirements the student may have already met.

Graduation
It is the student’s responsibility to file a Petition to Graduate by the deadline date during the semester in which he/she plans to complete the requirements. Diplomas are mailed at the end of each term. Please allow for 6-8 weeks processing time. Graduation ceremonies are held annually at the end of spring term.

Catalog rights and continuous enrollment for degrees and certificates
The college catalog specifies the requirements to earn a degree or certificate. The requirements in a specific academic year’s catalog are the student’s contract (catalog rights) with the college and that catalog defines what the student must complete to earn a degree or certificate.

Students may follow the catalog requirements that were in effect for the academic year when their attendance began at Diablo Valley College or follow the catalog requirements in effect during subsequent years of attendance provided
that continuous enrollment has been maintained. Effective fall 2009, continuous enrollment is defined as enrollment in at least one course at Diablo Valley College, Los Medanos College or Contra Costa College in an academic year (fall, spring, summer). The student must receive a grade or notation on their transcript of “A,” “B,” “C,” “D,” “F,” “P,” “NP,” “I” or “W” for the course. This continuous enrollment policy applies to students who are new, returning or continuing.

Students completing a degree may choose a G.E. pattern under one academic year and major program requirements from a different academic year. The academic year(s) chosen will need to be declared on the application for the degree. If there is a break in continuous enrollment, a student will be limited to the requirements of the academic year effective at the time of re-enrollment or those in subsequent years, as long as enrollment is continuous. Students who are not in continuous enrollment and do not re-enroll may petition for a degree or certificate but are subject to the catalog requirements in effect at the time of petition. The college may authorize or require course substitution for discontinued/changed courses or unit requirements. The college reserves the right to change catalog rights or program requirements based upon legal mandate and accreditation standards at any time. A student must complete a Course Substitution form to initiate substitutions to program requirements.

Catalog rights do not apply to CSU or IGETC certification. Students must follow the CSU or IGETC G.E. pattern in effect when they petition for certification. Courses used for certification must be on the approved list at the time they are taken.

**Associate degree graduation requirements for students entering fall 2010**

To be awarded the associate degree students must meet the following requirements:

1. **Unit requirement**
   A student is eligible for graduation with the associate in arts or associate in science degree after the satisfactory completion of a minimum of sixty (60) units of degree applicable course work with a grade point average of 2.0 (C) or higher. At least 12 units of degree applicable course work must be earned at DVC.

2. **Major/area of emphasis requirements**
   This requirement is satisfied by completing the courses listed as the major under various disciplines in the college catalog.

3. **General Education requirements**
   Students select from three options for general education:
   - Option 1 – Diablo Valley College general education
   - Option 2 – IGETC – Intersegmental General Education Transfer Curriculum
   - Option 3 – CSU – California State University general education pattern
   Please see end of section for specific requirements of these options.

4. **Additional requirements**
   - American institutions
   - Ecology of human health
   - Physical education

**Reasons for additional requirements for the**
associate degree.

I. American institutions
Addressing American institutions are courses that address the Constitution of the United States, the operation and evolution of representative democratic government, which include the legislative, judicial, executive branches and the electoral system, under that Constitution and have as a primary focus of examining the political philosophies of the framers of the Constitution and the nature and operation of United States political institutions and processes under that Constitution as amended and interpreted. In addition, courses strive to develop and gain an understanding of the rights, obligations and responsibilities of citizens in the political system established under the Constitution. These courses also cover the Constitution of the State of California within the framework of evolving Federal/State relations and the nature and processes of state and local government under that Constitution. Lastly, the courses analyze contemporary relations of State and local government with the Federal Government, the resolution of conflicts and the establishment of cooperative processes under the Constitutions of both the State and nation, and the political processes involved.

Course requirement - 0-6 units
Courses may fulfill other degree requirements, but units are counted only once.

Complete one course:
Political Science 121
Social Science 111

OR
one of the following pairs:
History 120 and History 121
History 120 and History 124
History 120 and History 128
History 120 and History 171
History 120 and Political Science 121
History 120 and Political Science 151
History 120 and Social Science 111
History 120 and Social Science 220
History 121 and History 127
History 121 and Political Science 121
History 121 and Social Science 111
History 121 and Social Science 115
History 121 and Social Science 120
History 121 and Social Science 220
History 124 and History 127
History 124 and Social Science 120
History 125 and Political Science 121
History 125 and Social Science 111
History 125 and Social Science 220
History 126 and Political Science 121
History 126 and Social Science 111
History 126 and Social Science 220
History 127 and History 128
History 127 and History 171
History 127 and Political Science 121
History 127 and Political Science 151
History 127 and Social Science 111
History 127 and Social Science 220
History 129 and Political Science 121
History 129 and Social Science 111
History 129 and Social Science 220
History 130 and Political Science 121
History 130 and Social Science 111
History 130 and Social Science 220
History 170 and History 171
History 170 and Political Science 121
History 170 and Social Science 111
History 170 and Social Science 220
History 171 and Political Science 121
History 171 and Social Science 111
History 171 and Social Science 115
History 171 and Social Science 120
History 171 and Social Science 220
Political Science 121 and Social Science 120
Political Science 151 and Social Science 120
Social Science 111 and Social Science 120
Social Science 120 and Social Science 220

Note: These pairs of courses also satisfy the CSU US History, Constitution and American Ideals statutory requirement.
II. Ecology of human health
The faculty believes that development and maintenance of personal and community health is basic to all endeavors of DVC graduates as workers, lifelong learners and citizens. To this end the health requirement will enable students to:
• develop an awareness of the dimensions of health and their interrelationships: physical, mental, intellectual, social, environmental, and spiritual;
• develop life skills to promote health and prevent disease;
• understand the primary structures and functions of the human body as it relates to health and disease processes;
• evaluate health care services, information, and products.

Course requirement - 0-3 units
Courses may fulfill other degree requirements, but the units are only counted only once.
Health Science 124, 140, 164, 170
Nutrition 115, 160

III. 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.

Course requirement - 2 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. Courses vary in units; more than one course may be needed to meet this requirement.
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.

General education options

Option 1

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 DVC 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 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 will be able to:
• develop an integrated and analytical approach to the study of art, humanities, languages, theater, film, literature and music within a historical, political, and sociological context.
• critically examine the relationships between the ways people live and the arts 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 variety of ways through which society, and the greater world, are examined and understood. The faculty believes that 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 American institutions,
• recognize points of view and their assumptions;
• critically examine generalizations in light of relevant evidence.

V. Multicultural studies
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.
VI. 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.

Program level student learning outcomes

DVC general education sequence

Students completing the program will be able to...
1. communicate effectively, both verbally and in writing,
2. critically analyze and solve problems using the appropriate technique for the issue at hand, including appropriate use of logic, mathematics, multi-disciplinary, and cultural considerations where applicable,
3. critically examine the function, media, subject matter, organization, aesthetic, style, and relative excellence of representative examples of the arts, literature, philosophy, and foreign languages including approaches from various historical, cultural, and gender-based origins,
4. develop an understanding of the information available, the perspectives and approaches of the physical, biological, social and behavioral sciences, appreciating the power and limits of these methods of inquiry and both individual, ethical, and societal responsibilities,
5. demonstrate physical and intellectual skills to promote health and prevent disease.

DVC general education requirements
These are the 2010-2011 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 higher:
English 122
AP English Language or English Literature with a score of 3 or higher meets this requirement.

B. Communications and analytical thinking
Course requirement - 3-4 units
Complete one course:
Business 240, 250, 255
Computer Science 100, 105, 110, 255, 265
English 123, 126
History 122
Mathematics 124, 135, 135SP, 142, 181, 182, 183, 191, 192, 193, 194, 195, 292, 294
Philosophy 130
Psychology 145
Sociology 122
Speech 121
AP Calculus AB or Calculus BC or Statistics with a score of 3 or higher meets this requirement.

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 higher, or transfer credit for an equivalent course from another accredited college or university.
   Business 240
   Engineering 111
   Mathematics 114, 120, 120SP, 121, 124, 135, 135SP, 142, 181, 182, 183, 191, 192, 193, 194, 195, 292, 294
2) Satisfy one of the following:
   • Receive a “C” grade or higher in the last term of a two-year high school Algebra sequence.
   • Score at least 520 on the SAT Math test.
   • Score 24 or above on the math section of the ACT test.
   • Pass any CLEP math exam.
   • Score 3 or higher on AP Calculus AB or Calculus 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:
Anthropology 115, 140
Astronomy 110, 120, 128
Biological Science 101, 102, 116, 117, 119, 120, 126, 130, 131, 139, 140, 146, 160, 170, 205
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
One of the following AP tests with a score of 3 or higher meets this requirement: Biology, Chemistry, Environmental Science, Physics B, or Physics C

III. Arts and humanities
Course requirement - 3-5 units
Complete one course:
Arabic 121
Architecture 155, 160
Art Digital Media 214
Art History 193, 195, 196, 197, 199
Chinese 121, 220, 221
Dance 201
Drama 139, 140, 141, 142, 180, 181
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
Film 140, 160, 180, 280, 281, 282, 283, 284
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, 171
Italian 121, 220, 221, 230, 231
Japanese 121, 147, 220, 221, 245
Music 110, 112, 114, 115, 116, 117, 118
Persian 121
Philosophy 120, 122, 140, 141, 220, 224, 225
Russian 121, 220, 221
Spanish 121, 220, 221, 230, 231, 250
One of the following AP tests with a score of 3 or higher meets this requirement: Art History, Chinese Language and Culture, English Literature, European History, French Language, French Literature, German Language, Italian Language and Culture, Japanese Language and Culture, Latin Literature, Latin: Vergil, Spanish Language, Spanish Literature, U.S. History, World History

IV. Social and behavioral sciences
Course requirement - 3 units
Complete one course:
Administration of Justice 120
Anthropology 120, 125, 130, 135, 150
Early Childhood Education 124
Economics 101, 200, 220, 221
Engineering 130
Geography 130, 135
History 120, 121, 124, 125, 126, 127, 128, 129, 130, 135, 136, 140, 141, 150, 151, 170, 171
Journalism 110
Political Science 120, 121, 220, 240, 250
Psychology 101, 122, 130, 140, 141, 160, 190, 200, 220, 225, 230, 240
Social Science 110, 111, 115, 120, 123, 220
Sociology 120, 121, 124, 125, 131, 135
One of the following AP tests with a score of 3 or higher meets this requirement: Comparative Government and Politics, European History, Human Geography, Macroeconomics, Microeconomics, Psychology, U.S. Government and Politics, U.S. History, World History
V. Multicultural studies  
Course requirement - 0-3 units  
(Courses may fulfill other degree requirements, but units are counted only once.)  
Complete one course:  
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 112, 114, 115, 116  
Psychology 140, 141  
Social Science 115, 120, 220  
Sociology 125, 131, 135

VI. Information literacy  
Course requirement 0-5 units  
(Courses may fulfill other degree requirements, but units are counted only once.)  
Complete one course:  
Biological Science 130  
Career 110  
Counseling 130  
Dental Hygiene 134  
Health Science 124  
Library Studies 121  
Nutrition 120  
Physical Education Theory 210

Option 2  
Intersegmental General Education Transfer Curriculum (IGETC)  
Program level student learning outcomes  
Program Level Student Learning Outcomes have been developed for each of the three Options for General Education. A complete list of program level student learning outcomes for each program is available in this catalog in Section four: Program Level Student Learning Outcomes. Students may also consult the website at www.dvc.edu/slo for the most current information.  

At the time this catalog went to press, the IGETC list for 2010-2011 had not yet been approved. The information on these pages is the list that was approved for the 2009-2010 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 or English Literature with a score of 3 or higher meets this requirement.

1-B. Critical thinking - English composition  
Course requirement - 3 units, 1 course  
Complete one course:  
English 123, 126  
History 122  
Philosophy 130  
Psychology 145  
Sociology 122  
Speech 121+
1-C. Oral communication - CSU requirement only
Course requirement - 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 one course:
Business 240+
Math 124+, 135+, 135SP+, 142+, 181, 182+, 183+, 191+, 192+, 193+, 194, 195, 292, 294

Note: AP Calculus AB or Calculus BC or Statistics with a score of 3 or higher meets this requirement.

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 one or more courses:
Art Digital Media 214
Art History 193, 195, 196, 197, 199
Dance 201
Drama 139, 140, 141, 142, 180, 181
Film 140, 160, 180+, 280, 281+, 282, 283, 284
Music 110, 115, 116
Music Literature 112, 114, 117+, 118+

Note: AP Art History with a score of 3 or higher counts as one course towards this requirement.

3-B. Humanities
Complete one or more courses:
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*+, 171*
Italian 121*+, 220*, 221*, 230*, 231*
Japanese 121*+, 147*+, 220*, 221*, 245*
Persian 121*
Philosophy 120, 122, 140, 141, 220, 224, 225
Russian 121*, 220*, 221*
Spanish 121*+, 220*, 221*, 230*, 231*, 250*

Note: Each of the following AP tests with a score of 3 or higher counts as one course towards this requirement: Art History, Chinese Language and Culture, English Literature, European History, French Language, French Literature, German Language, Italian Language and Culture, Japanese Language and Culture, Latin Literature, Latin: Vergil, Spanish Language, Spanish Literature, U.S. History; World History.

* 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+
Engineering 130
Geography 130, 135
History 120*+, 121*+, 124*, 125*, 126*, 127*+, 128*+, 129*, 130*, 135*, 136*, 140*, 141*, 150*, 151*, 170*+, 171*+
Journalism 110
Political Science 120, 121, 220, 240, 250
†Psychology 101, 122, 130, 140, 141, 160, 190, 200, 220, 225, 230, 240
Social Science 110, 111, 115, 120, 123+, 220  
‡Sociology 120, 121, 123, 124, 125, 131, 135

**Note:** Each of the following AP tests with a score of 3 or higher counts as one course towards this requirement: *Comparative Government and Politics, European History, Human Geography, Macroeconomics, Microeconomics, Psychology, U.S. Government and Politics, U.S. History, World History.*

‡ 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.

### 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 one course:  
Astronomy 110+ (add Astronomy 130 for lab), 120+ (add Astronomy 130 for lab), 128+  
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 Chemistry or Environmental Science or Physics B or Physics C* with a score of 3 or higher meets both 5A and 5C requirements.

#### 5-B. Biological science

**Course requirement** – 3-5 units, at least 1 course  
Complete at least one course:  
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* with a score of 3 or higher meets both 5B and 5C requirements.

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### 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.

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### 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. (A junior or senior high school transcript or approved test score must be on file in the Admissions and Records Office.)
  - or
- Must have successfully completed one of the following foreign language courses:  
  Arabic 120  
  Chinese 120  
  French 120  
  German 120+, 146+  
  Italian 120+  
  Japanese 120+, 146+  
  Persian 120  
  Russian 120  
  Sign Language 281  
  Spanish 120  
  or
- Requirement validated by more advanced course.

Please see a counselor for details on required test scores or other alternatives to demonstrating proficiency.

**Note:** *Advanced placement exams* - Acceptable scores of 3 or higher 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.
CSU graduation requirement in U.S. history, constitution and American ideals

6 units
The CSU graduation requirement may be fulfilled, but is not required, prior to transfer. Courses used to fulfill this requirement also meet course requirements in IGETC areas 3 OR 4.

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

(U.S. History, Constitution and American Ideals is considered by CSU to be a statutory rather than a general education requirement.)
Option 3
CSU General Education breadth requirements (CSU G.E.)

Program level student learning outcomes
Program Level Student Learning Outcomes have been developed for each of the three Options for General Education. A complete list of program level student learning outcomes for each program is available in this catalog in Section four: Program Level Student Learning Outcomes. Students may also consult the website at www.dvc.edu/slo for the most current information.

At the time this catalog went to press, the CSU General Education breadth requirements list for 2010-2011 had not yet been approved. The information on these pages is the list that was approved for the 2009-2010 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.

A. English language communication 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 or English Literature with score of 3 or higher meets this requirement.

A-3. Critical thinking
Course requirement - 3 units
Complete one course:
English 123, 126
History 122
Philosophy 130
Psychology 145
Sociology 122
Speech 121, 123

B. Scientific inquiry and quantitative reasoning
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 underlined and must be taken with matching lecture course.

B-1. Physical science
Course requirement - 3-5 units
Complete one course:
Astronomy 110 (add Astronomy 130* for lab), 120 (add Astronomy 130* for lab), 128*
Chemistry 106*, 108*, 109*, 120*, 121*, 226*, 227*
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 or Environmental Science or Physics B or Physics C with a score of 3 or higher meets both B-1 and B-3 requirements.

B-2. Life science
Course requirement - 3-5 units
Complete one course:
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 with a score of 3 or higher meets both B-2 and B-3 requirements.

B-3. Laboratory activity
Course requirement:
One course in B-1 or B-2 must be a laboratory course. Courses that meet the laboratory requirement are underlined in area B-1 and B-2 and must be taken with matching lecture course.
B-4. Mathematics/quantitative reasoning
Course requirement - 3-4 units
A grade of "C" or higher is required.
Complete one course:
Business 240
Mathematics 121, 124, 135, 135SP, 142, 181, 182, 183, 191, 192, 193, 194, 195, 292, 294
AP Calculus AB or Calculus BC or Statistics with a score of 3 or higher meets this requirement.

C. Arts and humanities
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 either Arts (C-1) or Humanities (C-2, for the total requirement of at least 9 units.

C-1. Arts (Art, Dance, Music, Theater)
Course requirement - 3-6 units
Complete one or more courses:
Architecture 120, 121, 130, 155, 156, 157, 160
Art 105, 120, 126, 140, 152, 160
Art Digital Media 214
Art History 193, 195, 196, 197, 199
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 110, 115, 116, 252, 255
Music Literature 112, 114, 117, 118
Speech 148
AP Art History with a score of 3 or higher counts as one course towards this requirement.

C-2. Humanities (Literature, Philosophy, Foreign Language)
Course requirement- 3-6 units
Complete one or more courses:
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
Italian 121, 220, 221, 230, 231
Japanese 121, 147, 220, 221, 245
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
Each of the following AP tests with a score of 3 or higher counts as one course towards this requirement: Art History, Chinese Language and Culture, English Literature, European History, French Language, French Literature, German Language, Italian Language and Culture, Japanese Language and Culture: Latin Literature, Latin: Vergil, Spanish Language, Spanish Literature, U.S. History, World History.

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

D-1. Anthropology and archeology
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
Sociology 124

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

D-7. Interdisciplinary social or behavioral science
Engineering 130
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
Each of the following AP tests with a score of 3 or higher counts as one course towards this requirement: Comparative Government and Politics, European History, Human Geography, Macroeconomics, Microeconomics, Psychology, U.S. Government and Politics, U.S. History, World History.

E. Lifelong understanding and self development
Course requirement - 3 units
Complete one course:
Career 110
Counseling 120
Early Childhood Education 124
Health Science 124, 140, 164, 70
Nutrition 115, 160
Physical Education-Dance 130, 136, 142
Psychology 122, 140, 141, 160, 200

Graduation requirement in U.S.
history, constitution and American ideals
6 units
The CSU graduation requirement may be fulfilled, but is not required, prior to transfer. Courses used to fulfill this requirement also meet course requirements in CSU G.E. areas C OR D.
History 120 and History 121
History 120 and History 124
History 120 and History 128
History 120 and History 171
History 120 and Political Science 121
History 120 and Political Science 151
History 120 and Social Science 111
History 120 and Social Science 220
History 121 and History 127
History 121 and Political Science 121
History 121 and Social Science 111
History 121 and Social Science 115
History 121 and Social Science 120
History 121 and Social Science 220
History 124 and History 127
History 124 and Social Science 120
History 125 and Political Science 121
History 125 and Social Science 111
History 125 and Social Science 220
History 126 and Political Science 121
History 126 and Social Science 111
History 126 and Social Science 220
History 127 and History 128
History 127 and History 171
History 127 and Political Science 121
History 127 and Political Science 151
History 127 and Social Science 111
History 127 and Social Science 220
History 128 and Political Science 121
History 128 and Social Science 115
History 128 and Social Science 120
History 128 and Social Science 220
History 129 and Political Science 121
History 129 and Social Science 111
History 129 and Social Science 220
History 130 and Political Science 121
History 130 and Social Science 111
History 130 and Social Science 220
History 170 and History 171
History 170 and Political Science 121
History 170 and Social Science 111
History 170 and Social Science 220
History 171 and Political Science 121
History 171 and Social Science 111
History 171 and Social Science 115
History 171 and Social Science 120
History 171 and Social Science 220
Political Science 121 and Social Science 120
Political Science 151 and Social Science 120
Social Science 111 and Social Science 120
Social Science 120 and Social Science 220

Note: These pairs of courses also satisfy the CSU US History, Constitution and American Ideals statutory requirement.

(U.S. History, Constitution and American Ideals is considered by CSU to be a statutory rather than a general education requirement.)
Offering more than 30 career/technical programs and over 75 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 demonstrate to employers that they have acquired 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. In many cases, courses completed as part of a certificate program can be applied to a degree program. Only certificates of achievement and associate degrees are recorded on the student’s 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 higher 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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<th>Certificate Program</th>
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* offered in collaboration with Ohlone College, which grants the degree
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Check [www.dvc.edu/slo](http://www.dvc.edu/slo) for the latest updates to our program level student learning outcomes.
ADDICTION STUDIES – ADS

Associate in science degree
Addiction counseling

Students completing the program will be able to...
1. co-facilitate group discussions,
2. create helping strategies and treatment modalities based on a client’s stage of dependence change or recovery,
3. demonstrate an understanding of a variety of addiction treatment models,
4. recognize the importance of social and community services in the treatment and recovery process,
5. demonstrate an understanding of how addiction affects family systems,
6. demonstrate an understanding of various assessment tools, treatment plans and charting protocols,
7. demonstrate an understanding of legal and ethical concerns for workers in the addiction field,
8. demonstrate basic listening skills.

The 4 learning outcomes below are valid for the following degree and certificate in Addiction Studies.

Associate in science degree
Addiction studies

Certificate of achievement
Addiction studies

Students completing the program will be able to...
1. create helping strategies and treatment modalities based on a client’s stage of dependence change or recovery,
2. understand a variety of addiction treatment models,
3. recognize the importance of social and community services in the treatment and recovery process,
4. understand how addiction affects family systems,
5. understand various assessment tools, treatment plans and charting protocols.

Certificate of achievement
Addiction counseling

Students completing the program will be able to...
1. demonstrate an understanding of how addiction affects family systems,
5. demonstrate an understanding of various assessment tools, treatment plans and charting protocols.

ADMINISTRATION OF JUSTICE – ADJUS

Associate in science degree
Administration of justice

Students completing the program will be able to...
1. demonstrate an understanding of the three parts of the criminal justice system and how they interrelate,
2. demonstrate a working knowledge of the theory and practice of criminal law,
3. demonstrate an understanding of the legal procedures of the United States and California criminal justice systems.

Certificate of achievement
Administration of justice

Students completing the program will be able to...
1. demonstrate a working knowledge of the basic components of the criminal justice system,
2. demonstrate a working knowledge of the theory and practice of criminal law,
3. demonstrate an understanding of the legal procedures of the United States and California criminal justice systems.

Certificate of accomplishment
Administration of justice - Community relations specialist

Students completing the program will be able to...
1. demonstrate an understanding of the theoretical and conceptual overview of multicultural concepts and issues as they relate to the criminal justice system,
2. demonstrate an understanding of the history, culture, organization of criminal gangs and their social and criminal impact upon society.

Certificate of accomplishment
Administration of justice - Correctional specialist

Students completing the program will be able to...
1. demonstrate familiarity with the basic components of the criminal justice system with special emphasis on the correctional system,
Program level student learning outcomes - Administration of justice

2. demonstrate an understanding of the history, culture, organization of criminal gangs and their social and criminal impact on society,
3. apply techniques of written and oral communication with special emphasis on case work and counseling as used by practitioners in the administration of justice field with special emphasis on probation and parole.

Certificate of accomplishment  
Administration of justice -  
Crime scene investigator

Students completing the program will be able to...
1. demonstrate an understanding of the three parts of the criminal justice system and how they interrelate,
2. identify, collect, package and analyze physical evidence from a crime scene,
3. conduct a successful criminal investigation using interviews, interrogation and case preparation.

Certificate of accomplishment  
Administration of justice -  
Criminal law specialist

Students completing the program will be able to...
1. demonstrate an understanding of the three parts of the criminal justice system and how they interrelate,
2. demonstrate a working knowledge of the theory and practice of criminal law,
3. demonstrate an understanding of the legal procedures of the United States and California criminal justice systems.

Certificate of accomplishment  
Administration of justice -  
Juvenile counseling

Students completing the program will be able to...
1. demonstrate an understanding of the three parts of the criminal justice system and how they interrelate,
2. demonstrate an understanding of the history, culture, organization of criminal gangs and their social and criminal impact on society,
3. demonstrate proficiency with handguns and shotguns, an understanding of personal safety and defensive tactics and their legal ramifications.

Certificate of accomplishment  
Administration of justice -  
Patrol specialist

Students completing the program will be able to...
1. demonstrate an understanding of the three parts of the criminal justice system and how they interrelate,
2. gather, organize and prepare written reports for law enforcement and correctional activities,
3. communicate architectural concepts using graphic conventions and representational methods,
4. demonstrate an understanding of drawing methods and graphic compositional techniques,
5. construct physical models of architectural elements and spaces,
6. demonstrate an understanding of building components, structures and systems in relation to design,
7. identify notable architects, design concepts, canonical buildings and precedents in architecture,
8. identify the historical and contemporary role of architects in the profession and related design fields.

ART DIGITAL MEDIA – ARTDM

Associate in arts degree  
Art digital media

Students completing the program will be able to...
1. demonstrate an understanding of basic drawing techniques,
2. produce a digital image from scanned or digital photographs,
3. utilize digital images for exports to websites, multimedia presentations, and print,
4. utilize production tools for digital audio for multimedia projects,
5. demonstrate basic techniques for video capture and editing,
6. design a multimedia project,
7. critically evaluate multimedia design techniques and their use in the development of a professional portfolio,
8. qualify for entry-level employment in the art digital media field.
Certificate of achievement
Art digital media - Character animation

Students completing the program will be able to...
1. design a character based on a written description,
2. present an animation containing the elements of a fully developed cartoon,
3. produce a storyboard utilizing the principles of sequential art,
4. develop observational skills in drawing the human figure.

Certificate of achievement
Art digital media - Digital audio

Students completing the program will be able to...
1. utilize production tools for digital audio for multimedia projects,
2. apply various audio file formats,
3. produce recorded music projects.

Certificate of achievement
Art digital media - Digital imaging

Students completing the program will be able to...
1. create digital images suitable for printing or multimedia applications,
2. create graphic design projects,
3. evaluate digital images for effective design.

Certificate of achievement
Art digital media - Motion graphics

Students completing the program will be able to...
1. create motion graphic projects,
2. utilize digital production tools for web delivery,
3. demonstrate competency in various aspects of digitizing, importing, and exporting images.

Certificate of achievement
Art digital media - 3D Modeling and animation

Students completing the program will be able to...
1. create 3D animation projects,
2. critique animations,
3. demonstrate basic skills, color manipulation, and design principles unique to animation.

Certificate of achievement
Art digital media - Web design

Students completing the program will be able to...
1. construct and publish web pages,
2. use HTML code in creating web pages,
3. create a variety of websites effectively using animation, design concepts, and interactivity.

Certificate of accomplishment
Art digital media - Foundation

Students completing the program will be able to...
1. demonstrate an understanding of basic drawing techniques,
2. produce a digital image from scanned or digital photographs,
3. utilize digital images for exports to websites, multimedia presentations, and print,
4. utilize production tools for digital audio for multimedia projects,
5. demonstrate basic techniques for video capture and editing,
6. design a multimedia project,
7. critically evaluate multimedia design techniques and their use in the development of a professional portfolio,
8. qualify for entry-level employment in the art digital media field.

BROADCAST COMMUNICATION ARTS – BCA

The 11 learning outcomes below are valid for all degrees and certificates in Broadcast Communication Arts.

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

Students completing any program will be able to...
1. produce for broadcast and digital distribution utilizing three-camera studio format principles (except Basic Digital Field Production and Basic Writing for Digital Medium),
2. operate cameras and professional sound equipment (except Basic Writing for Digital Medium),
3. perform digital nonlinear editing (except Basic Writing for Digital Medium),
4. produce still and motion graphics (except Basic Writing for Digital Medium),
5. produce for broadcast and digital distribution utilizing field production principles (except Basic Studio Production and Basic Writing for Digital Medium),
6. write scripts for various production formats,
7. direct projects for various production formats,
8. transfer to four-year institutions majoring in broadcast communication arts,
9. qualify for entry-level employment in broadcasting,
10. apply their planning skills for project management,
11. identify major trends in the history of broadcasting.

**BUSINESS – BUS**

**Associate in arts degree**

**Business transfer**

**Students completing the program will be able to...**
1. develop business communications that present information in an organized and concise manner, using acceptable grammar and language arts,
2. explain the functions of business financial operations and apply them to business case problems,
3. evaluate an existing business and identify the business organization, key business procedures relevant to a specific problem using appropriate technology,
4. compare and contrast ethical approaches and social responsibility options in business situations.

**Certificate of achievement**

**Business - Core transfer**

**Students completing the program will be able to...**
1. develop business communications that present information in an organized and concise manner, using acceptable grammar and language arts,
2. explain the functions of business financial operations and apply them to business case problems,
3. evaluate an existing business and identify the business organization, key business procedures relevant to a specific problem using appropriate technology,
4. compare and contrast ethical approaches and social responsibility options in business situations.

**Certificate of achievement**

**Wealth management**

**Students completing the program will be able to...**
1. demonstrate knowledge of business operations, the business organization and business procedures,
2. interview clients to determine clients’ assets, liabilities, cash flow, insurance coverage, tax stats, and financial objectives,
3. develop financial plans based on analysis of clients’ financial status, and discuss financial options with clients,
4. review all securities transactions to ensure accuracy of information and conformance to governing agency regulations,
5. identify potential clients, using advertising campaigns, mailing lists, and personal contacts,
6. review financial periodicals, stock and bond reports, business publications, and other material to identify potential investments for clients and to keep abreast of trends affecting market conditions,
7. contact prospective customers to determine customer needs, present information, and explain available services,
8. implement technology to research/solve business questions and problems.

**Certificate of achievement**

**Business essentials**

**Students completing the program will be able to...**
1. apply standard business English to oral and written communication, including grammar, punctuation, mechanics, vocabulary, style and usage,
2. complete business-related mathematical problems with reasonable speed and accuracy, both manually and using calculators and business software,
3. analyze basic business documents and financial statements to detect business problem,
4. interpret a research need, determine the type and scope of information needed, and implement effective research strategies including the Internet.

**BUSINESS ACCOUNTING – BUSAC**

**Certificate of achievement**

**General accounting**

**Students completing the program will be able to...**
1. produce accurate financial statements for a company and communicate a company’s financial position,
2. construct basic accounting documents and solve case problems related to the accounting cycle utilizing appropriate technology,
3. analyze existing documents by verifying the accuracy of information for a company and performing necessary reconciliation,
4. compare and contrast the financial information prepared for different types of business entity.

**BUSINESS INFORMATION MANAGEMENT – BUSIM**

**Certificate of achievement**
Office professional

**Students completing the program will be able to...**
1. apply standard business English to oral and written communication, including grammar, punctuation, mechanics, vocabulary, style and usage,
2. complete business-related mathematical problems with reasonable speed and accuracy, using calculators and business software,
3. interpret an information technology need, determine the type and scope of solution needed, and implement an effective strategy to address the need,
4. identify appropriate information compilation, reporting, storage and retrieval systems for common business situations, using manual and technological approaches.

**Certificate of accomplishment**
Office professional essentials

**Students completing the program will be able to...**
1. apply standard business English to oral and written communication, including grammar, punctuation, mechanics, vocabulary, style and usage,
2. complete business-related mathematical problems with reasonable speed and accuracy, both manually and using calculators and business software,
3. analyze common business documents and financial statements to detect business problems,
4. interpret an information technology need, determine the type and scope of application needed, and implement an effective strategy to meet the need.

**BUSINESS MARKETING – BUSMK**

**Certificate of achievement**
Business marketing

**Students completing the program will be able to...**
1. demonstrate knowledge of business operations, the business organization, and business procedures,
2. determine the demand for products and services offered by a firm and its competitors and identify potential customers,
3. develop pricing strategies with the goal of maximizing the firm’s profits or share of the market while ensuring the firm’s customers are satisfied,
4. participate in product development or monitor trends that indicate the need for new products and services,
5. implement technology to research/solve business questions and problems.

**BUSINESS REAL ESTATE – RE**

**Certificate of achievement**
Real estate

**Students completing the program will be able to...**
1. explain the functions of real estate markets, real estate practices, and real estate institutions, and recommend choices for common real estate situations,
2. demonstrate how to calculate the time value of money and evaluate various financing alternatives for real estate investment strategies,
3. evaluate real estate development opportunities in the commercial real estate markets for residential, warehouse, retail, and industrial properties,
4. research and analyze specific case problems related to real estate investment and present solutions.

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**Chinese – CHIN**

Certificate of achievement
Mandarin Chinese

Students completing the program will be able to...
1. comprehend a spoken dialogue in the target language,
2. identify the present, past and future tenses in a written paragraph,
3. interpret cultural behavior.

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**Computer Information Systems – CIS**

The 9 learning outcomes below are valid for the degree and all certificates in Computer Information Systems.

Students completing any program will be able to...
1. perform the duties of information technologies and management workers as identified by the Bureau of Labor Statistics,
2. provide technical assistance and training to computer system users,
3. investigate and resolve computer software and hardware problems of users,
4. perform the professional duties demanded in any modern office environment,
5. design and maintain static and dynamic web sites,
6. integrate elements such as graphics, animation and streaming media on web sites,
7. develop and implement database systems for stand alone or internet based deployment,
8. use technology to manage multi-faceted projects,
9. demonstrate basic graphical user interface operations in a computer environment.

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**Associate in science**
Computer information systems

In addition, students completing this program will be able to...
1. produce spreadsheets, documents and presentations by using basic to advanced software operations.

**Certificate of achievement**
Core

In addition, students completing this program will be able to...
1. produce spreadsheets, documents and presentations by using basic to advanced software operations.

**Certificate of achievement**
Database management

In addition, students completing this program will be able to...
1. produce spreadsheets, documents and presentations by using basic to advanced software operations,
2. apply database syntax, properties, operators, and functions.

**Certificate of achievement**
Project management

In addition, students completing this program will be able to...
1. produce spreadsheets, documents and presentations by using basic to advanced software operations,
2. apply the principles of the Project Management Institute (PMI) processes of project management.

**Certificate of achievement**
Web graphics

In addition, students completing this program will be able to...
1. produce spreadsheets, documents and presentations by using basic to advanced software operations,
2. perform the duties demanded in any modern office environment,
3. prepare images for sharing and distribution.
Certificate of achievement
Web technology
In addition, students completing this program will be able to...
1. produce spreadsheets, documents and presentations by using basic to advanced software operations,
2. plan and design web pages.

Certificate of accomplishment
Database management
In addition, students completing this program will be able to...
1. apply database syntax, properties, operators, and functions.

Certificate of accomplishment
Project management
In addition, students completing this program will be able to...
1. apply the principles of the Project Management Institute’s (PMI) processes of project management.

Certificate of accomplishment
Web graphics
In addition, students completing this program will be able to...
1. prepare images for sharing and distribution.

Certificate of achievement
Web technology
In addition, students completing this program will be able to...
1. plan and design web pages.

Students completing the program will be able to...
1. list and describe the key TCP/IP protocols,
2. secure a Microsoft Windows network,
3. build a computer,
4. install and configure Microsoft Windows Server Operating System.

COMPUTER SCIENCE – COMSC
The 4 learning outcomes below are valid for the degree and the certificate of achievement in Computer Science.

Associate in science degree
Computer science

Certificate of achievement
Computer and information science
Students completing the program will be able to...
1. create computer programming solutions using either C++ or Java,
2. read and write programs written in x86 assembly language, and interface them with C++ programs,
3. effectively use either the C++ Standard Template Library or the Java util package to manage data structures in programs,
4. make the right choices of language, platform, data structures, and databases for a computer programming solution based on their knowledge of the elements of program design.

Certificate of achievement
Microcomputer software support
Students completing the program will be able to...
1. communicate effectively in a typical office environment through written and verbal media,
2. apply the basic vocabulary of computer technology and information systems,
3. use word processing, spreadsheet, presentation, and database software to communicate effectively and professionally,
4. demonstrate basic mathematical skills in problem solving,
5. write instructions for using applications,
6. provide training on the use of software and computer systems.

COMPUTER NETWORK TECHNOLOGY – CNT
The 4 learning outcomes below are valid for the degree and certificate in Computer Network Technology.

Associate in science degree
Microsoft Windows system administration

Certificate of achievement
Microsoft Windows system administration
COMPUTER TECHNICAL SUPPORT – COMTC

The 3 learning outcomes below are valid for the degree and certificates in Computer Technical Support.

Associate in science degree
Computer technical support

Certificate of achievement
Computer technical support

Certificate of accomplishment
Computer technical support

Students completing the program will be able to...
1. troubleshoot and repair computer hardware problems,
2. troubleshoot and repair computer software problems related to operating systems, application programs and printer systems,
3. troubleshoot and repair computer network problems.

CONSTRUCTION – CONST

Certificate of achievement
Construction and building inspection

Students completing the program will be able to...
1. interpret the codes related to the construction industry,
2. identify code-compliant construction in buildings,
3. identify types of zoning used in a jurisdiction,
4. write knowledgeable correction notices,
5. apply construction terminology,
6. identify the effects of various governmental agencies involved in the construction industry on a construction project,
7. interpret blueprints and specifications.

Certificate of achievement
Construction supervision and superintendency

Students completing the program will be able to...
1. estimate materials cost (quantity survey),
2. apply construction terminology,
3. schedule sequences of construction projects,
4. identify the effects of various governmental agencies involved in the construction industry on a construction project,
5. interpret blueprints and specifications,
6. utilize instruments used in surveying.

CULINARY ARTS – CULN

Certificate of achievement
Baking and pastry

Students completing the program will be able to...
1. explain and apply baking/pastry terms and procedures appropriately,
2. select, organize, and analyze ingredients used in baking and pastry production,
3. select, recognize, and utilize equipment and tools used in baking and pastry production,
4. scale and measure ingredients properly,
5. produce an array of bakery and pastry products,
6. evaluate quality standards in baking and pastry products in written and oral form.

Certificate of achievement
Culinary arts

Students completing the program will be able to...
1. demonstrate the proper application of dry, moist, and combination cooking methods to a variety of food products,
2. demonstrate current food service sanitation procedures,
3. prepare and serve food according to professional industry standards,
4. calculate costs and apply procedures in order to run a cost effective food service establishment,
5. create menus that incorporate menu planning principles that maximize sales and profits,
6. produce a variety of bakery products using standard baking procedures and evaluate the products based on method, timing, appearance, texture, cell structure and overall eating quality,
7. demonstrate the ability to work as an effective member of a production team.
Certificate of achievement  
Restaurant management

Students completing the program will be able to...
1. identify and explain factors that determine quality food,
2. explain the theory of yield management as it relates to lodging operations,
3. present ideas and concepts in written and oral form,
4. calculate cost and apply procedures in order to run a cost effective foodservice establishment.

DENTAL ASSISTING – DENTL

The 3 learning outcomes below are valid for the degree and certificate in Dental Assisting.

Associate in science degree  
Dental assisting

Certificate of achievement  
Dental assisting

Students completing the program will be able to...
1. attain their dental X-ray license,
2. qualify to sit for the State of California Board written and practical RDA exam,
3. qualify to sit for their National Board examinations to become a certified dental assistant.

DENTAL HYGIENE – DENHY

The 5 learning outcomes below are valid for the degree and certificate in Dental Hygiene.

Associate in science degree  
Dental hygiene

Certificate of achievement  
Dental hygiene

Students completing the program will be able to...
1. synthesize knowledge from all branches of learning to provide preventive, educational, collaborative, and therapeutic dental hygiene care for individuals and groups in a variety of settings,
2. develop a desire and ability to provide dental hygiene care applying the highest moral, ethical and legal principles including those outlined by the American Dental Hygienists’ Association and the American Dental Association,
3. function in the professional dental hygiene roles of the clinician, health promoter/educator and change agent,
4. develop and maintain professional competence founded in evidence-based decision-making and continued education while promoting personal and professional growth,
5. promote client and community satisfaction with the quality of the dental hygiene education and care process provided by the program.

DENTAL LABORATORY TECHNOLOGY – DENTE

The 6 learning outcomes below are valid for the degree and certificate in Dental Laboratory Technology.

Associate in science degree  
Dental laboratory technology

Certificate of achievement  
Dental laboratory technology

Students completing the program will be able to...
1. qualify for positions as dental technicians in the commercial lab industry as well as in dentists offices as in-house dental technicians,
2. demonstrate knowledge in the fabrication of a variety of dental inlays, onlays and ceramic restorations,
3. comprehend and interpret dental terminology as well as the dentist prescriptions,
4. demonstrate skills in the development of prostodontic appliances and perform denture relines and a variety of denture repairs,
5. demonstrate knowledge in cusp-to-fossae relationships and concepts of occlusion and malocclusions,
6. demonstrate knowledge in the manipulation of a variety of gypsum products such as plaster, die stone, yellow stone and investment products (high heat) and (low heat).

DRAMA – DRAMA

The 3 learning outcomes below are valid for the degree and certificate in Drama.

Associate in arts degree  
Technical theater

Certificate of achievement  
Technical theater

Students completing the program will be able to...
1. demonstrate the basic skills required in the craft of theater,
2. articulate the creative process of theatrical tasks,
3. exhibit the unique collaborative skills necessary to participate in a theater community.
EARLY CHILDHOOD EDUCATION – ECE

The 9 learning outcomes below are valid for the degree and certificates in Early Childhood Education.

Certificate of achievement
Early childhood education - Basic

Certificate of achievement
Early childhood education - Teacher

Students completing the program will be able to...
1. identify major childhood development milestones,
2. analyze the psychological, physical, and cognitive influences on human development,
3. demonstrate knowledge of developmentally appropriate practices in early childhood education,
4. demonstrate familiarity with community agencies which support contemporary family life,
5. apply strategies to maximize the health, safety and nutrition of children and adults in programs for young children,
6. examine constructivist and emergent curriculum theories,
7. identify biases and preconceptions that influence effective child care,
8. communicate effectively and responsibly with children and adults in diverse populations,
9. plan, implement and evaluate developmentally appropriate curriculum experiences for young children.

Certificate of achievement
Early childhood education - Site supervisor

In addition, students completing this program will be able to...
1. recognize and support developmental stages in teacher training,
2. demonstrate sensitivity to and awareness of diversity in adult learners,
3. apply ethical code to practices and policies,
4. examine theory and methodology for effective supervision of personnel.

Certificate of achievement
Early childhood education - Master teacher

In addition, students completing this program will be able to...
1. recognize and support developmental stages in teacher training,
2. demonstrate sensitivity to and awareness of diversity in adult learners.

Certificate of achievement
Early childhood education - Family daycare provider/foster care provider/in-home childcare provider

Students completing the program will be able to...
1. identify major childhood development milestones,
2. apply strategies to maximize the health, safety, and nutrition of children and adults in programs for young children,
3. demonstrate familiarity with community agencies which support contemporary family life.

Certificate of accomplishment
Early childhood education - Associate teacher

Students completing the program will be able to...
1. evaluate personal teaching competencies to guide and inform practice,
2. integrate knowledge of children’s development and needs into early childhood environments.

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

Students completing the program will be able to...
1. identify the role that California Children and Family Services plays in the life of resource family,
2. identify the role that California Children and Family Services plays in the life of a child in out-of-home placement,
3. apply appropriate behavior management techniques for children in their care.
ELECTRICAL/ELECTRONICS TECHNOLOGY – ELECT/ELTRN

The 3 learning outcomes below are valid for the degree and certificates in Electrical/Electronics Technology.

Associate in science degree
Electrical/electronics technology

Certificate of achievement
Electrical/electronics technology

Students completing the program will be able to...
1. solve electrical circuit problems using Ohm’s law,
2. build and troubleshoot electrical/electronics circuits at an apprenticeship level,
3. program Programmable Logic Controllers (PLCs).

ENERGY SYSTEMS – ENSYS

The 3 learning outcomes below are valid for the degree and certificate in Energy Systems.

Associate in science degree
with photovoltaic emphasis

Certificate of achievement
Photovoltaic systems

Students completing the program will be able to...
1. install a ground mount photovoltaic system,
2. install a roof mounted photovoltaic system,
3. design a roof-mounted photovoltaic system.

The 3 learning outcomes below are valid for the following degree and certificate in Energy Systems.

Associate in science degree
with solar thermal emphasis

Certificate of achievement
solar thermal systems

Students completing the program will be able to...
1. install and configure flat panel solar thermal water systems,
2. install and configure evacuated tube solar thermal water systems,
3. troubleshoot and repair solar thermal water systems.

ENGINEERING AND ENGINEERING TECHNOLOGY – ENGIN

Associate in science degree
Civil design drafting technology

Students completing the program will be able to...
1. use technical drafting principles to develop technical drawings,
2. interpret construction blueprints,
3. use geometric construction and descriptive geometry to solve geometric problems,
4. create 2-dimensional and 3-dimensional Computer Aided Drawings (CAD),
5. interpret Global Positioning data,
6. measure land forms using ground surveying equipment,
7. apply trigonometry to math problems,
8. apply the basic laws of physics to everyday situations.

Certificate of achievement
Civil drafting - CAD

Students completing the program will be able to...
1. apply civil drafting principles to interpret and develop civil engineering maps,
2. interpret construction blueprints,
3. create 2-dimensional and 3-dimensional Computer Aided Drawings (CAD),
4. interpret Global Positioning data,
5. measure land forms using ground surveying equipment,
6. use general computer software such as Microsoft Word and Excel,
7. apply trigonometry to math problems.
Certificate of achievement
Civil design drafting technology

Students completing the program will be able to...
1. use technical drafting principles to develop technical drawings,
2. interpret construction blueprints,
3. use geometric construction and descriptive geometry to solve geometric problems,
4. create 2-dimensional and 3-dimensional Computer Aided Drawings (CAD),
5. interpret Global Positioning data,
6. measure land forms using ground surveying equipment,
7. apply trigonometry to math problems,
8. apply the basic laws of physics to everyday situations.

Certificate of accomplishment
Computer aided drafting and digital media for engineering and architecture

Students completing the program will be able to...
1. create 2-dimensional and 3-dimensional Computer Aided Drawings (CAD),
2. interpret construction blueprints and architectural plans (with Option A: civil engineering emphasis),
3. calculate data collected from land surveying (with Option A: civil engineering emphasis),
4. interpret simple technical drawings (with Option B: manufacturing emphasis),
5. construct 3-Dimensional models using parametric software (with Option C: CAD design emphasis).

The 5 learning outcomes below are valid for the below certificates in Mechanical Drafting.

Certificates of achievement
Mechanical design drafting technology

Mechanical drafting - CAD

Students completing the program will be able to...
1. prepare, interpret and revise technical drawings using computer aided drafting (CAD) and design software,
2. use geometric dimensioning and tolerancing according to ANSI standards,
3. develop CAD drawings using geometric construction and descriptive geometry,
4. perform basic machine processes,
5. identify the role of computers and CAD in mechanical drafting.

ENGLISH – ENGL

Associate in arts degree
English

Students completing the program will be able to...
1. demonstrate knowledge of and familiarity with the methods of interpreting literature across the genres,
2. assess, evaluate, and analyze ideas expressed in text or in spoken language,
3. create (write or present) coherent arguments that evidence clear prose and synthesize diverse bodies of knowledge.

FRENCH – FRNCH

Certificate of achievement
French

Students completing the program will be able to...
1. comprehend a spoken dialogue in the target language,
2. identify the present, past and future tenses in a written paragraph,
3. interpret cultural behavior.

GEOGRAPHY – GEOG

Associate in arts degree
Social/cultural geography

Students completing the program will be able to...
1. describe the spatial organization of the world’s peoples, nations, cultural environments,
2. compare and contrast the levels of economic development and their underlying environmental and cultural factors,
3. demonstrate a global view with appreciation for diverse cultures and societies.

Associate in science degree
Meteorology

Students completing the program will be able to...
1. describe the structure and properties of the atmosphere and atmospheric circulation systems,
2. develop and explain a forecast in the short to medium time range,
3. demonstrate the ability to apply atmospheric studies to interdisciplinary and practical applications for commercial and public needs.
Associate in science degree  
Physical geography

Students completing the program will be able to...
1. demonstrate proficiency in the use of field data collection and mapping techniques,
2. compare and contrast the interactions between the natural environment and human activities,
3. demonstrate a grounding in the modern technical skills of the discipline, including computer cartography, geographic information systems and global positioning systems.

The 3 learning outcomes below are valid for the following degree and certificates in GIS/GPS

**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

Students completing the program will be able to...
1. analyze the inter-disciplinary applications of GIS, GPS, and remote sensing,
2. synthesize data from various sources and different formats for spatial analyses,
3. apply spatial tools and techniques in a research or work environment.

**HEALTH SCIENCE – HSCI**

**Associate in science degree**  
Health education

Students completing the program will be able to...
1. apply a multi-dimensional approach to health that incorporates the study of social, behavioral and physiological sciences,
2. identify risk factors for disease and disability,
3. analyze the psychological, physical, social, sexual, and environmental influences on health and wellness,
4. demonstrate behavior-changing techniques to maximize health and wellness,
5. identify jobs for health educators such as Workplace Wellness Programs, County Health Department, Hospital/Health Insurance Health Education Center, State or University Health Center, Planned Parenthood, or any health club that offers health education information,
6. pursue specialized occupations in the health profession, such as the above stated,
7. pursue baccalaureate degrees useful in the field of health education.

**HORTICULTURE – HORT**

**Certificate of achievement**  
Horticulture

Students completing the program will be able to...
1. apply their knowledge of plants to the landscape setting,
2. apply their knowledge of the environment to the landscape setting,
3. predict plant outcomes,
4. appraise available career paths.

**Certificate of achievement**  
Landscape construction

Students completing the program will be able to...
1. prepare, model and contour ground prior to planting,
2. stake and plant a tree,
3. plant shrubs from a design plan,
4. design and plant a winter or spring bedding scheme,
5. recognize the features and use of the following displays: annuals, perennials, and bulbs.
Certificate of achievement
Landscape design

Students completing the program will be able to...
1. develop fundamental designer and client communication techniques,
2. perform a site analysis and inventory,
3. measure a site, calculate site slope and relationship to site structures,
4. recognize and develop a personal landscape design process,
5. create presentations through graphic sketching and drafting,
6. identify plant and non-plant material suitable for specific site design,
7. produce a portfolio and related documents necessary to enter the marketplace.

Certificate of achievement
Landscape maintenance

Students completing the program will be able to...
1. know how to control weed,
2. maintain and use a lawnmower and demonstrate safe working practices,
3. demonstrate the following skills: pruning, training, trimming,
4. recognize and control common pests and diseases,
5. identify areas requiring maintenance,
6. understand the use of different types of herbicides, pesticides and fertilizers.

Certificate of achievement
Italian

Students completing the program will be able to...
1. comprehend a spoken dialogue in the target language,
2. identify the present, past and future tenses in a written paragraph,
3. interpret cultural behavior.

Certificate of achievement
Japanese

Students completing the program will be able to...
1. comprehend a spoken dialogue in the target language,
2. identify the present, past and future tenses in a written paragraph,
3. interpret cultural behavior.

Certificate of achievement
Library technology

Students completing the program will be able to...
1. explain library fundamental principles including intellectual freedom, open access, diversity, and patron privacy and confidentiality,
2. apply knowledge and skills gained through the coursework to perform library technician level tasks,
3. describe the characteristics of libraries and the roles of libraries in a diverse, multicultural, and democratic society, and how these needs can be met,
4. apply the basic principles and standardized systems of ordering, cataloging, classifying, processing, and maintaining library materials and resources,
5. demonstrate the workplace communication skills necessary to successfully interact with users and staff in the library and other information services.
6. identify and use the technologies found in the library and other information services,
7. analyze information critically to draw conclusions and/or solve problems when working with patrons, materials, and technology.

MATHEMATICS – MATH

Associate in arts degree
Mathematics

Students completing the program will be able to...
1. solve problems in linear algebra and differential and integral calculus, both single and multivariable,
2. recognize, explain, and apply basic techniques of mathematical proof,
3. utilize skills from calculus and post-calculus mathematics to solve mathematical problems from sciences such as physics, chemistry, engineering, or computer science.

MUSIC – MUSIC

Certificate of achievement
Music industry studies

Students completing the program will be able to...
1. produce recorded music projects,
2. protect intellectual property rights,
3. demonstrate the professional behaviors of participation and time management required in the music industry.

PHYSICAL EDUCATION THEORY – PETHE

The 4 learning outcomes below are valid for the following degree and certificate in Coaching.

Associate in science degree
Coaching

Certificate of achievement
Coaching

Students completing the program will be able to...
1. develop practice plans, analyze strategy and teach techniques specific to a chosen sport,
2. incorporate concepts of an athlete’s psychological and physical health to improve performance,
3. qualify for employment as an effective coach of youth, high school, and/or adult sports (certificate),
4. apply for transfer to a four-year institutions in such disciplines as kinesiology, exercise science and/or a teacher credential program (degree only).

POLITICAL SCIENCE – POLSC

Associate in arts degree
Political science

Students completing the program will be able to...
1. recognize political values embedded in systems of political thought,
2. describe the basic structures and procedures of American government,
3. describe the relative impact of federal, state and local governments on the inhabitants of California,
4. describe the content and origins of several world philosophies,
5. demonstrate an understanding of fundamental political concepts,
6. recognize and discuss various elements of power in political activity.

**PSYCHOLOGY – PSYCH**

**Associate in arts degree**
Psychology

Students completing the program will be able to...
1. identify the major theoretical orientations in psychology and demonstrate knowledge of basic psychological concepts regarding behavior and mental processes,
2. demonstrate knowledge of research methods, ethical considerations in conducting research, and effective use of the American Psychological Association (APA) style in presenting information,
3. utilize critical thinking skills to analyze, evaluate, and make decisions concerning complex contemporary issues in psychology,
4. recognize the complexity of social, cultural, and international diversity,
5. apply psychological principles to the development of interpersonal, occupational, and social skills, and life-long personal growth,
6. demonstrate understanding of major theories, concepts, and research findings in selected content areas of psychology, such as lifespan development, personality and social psychology, neuroscience, and abnormal psychology.

**SPANISH – SPAN**

**Certificate of achievement**
Spanish

Students completing the program will be able to...
1. comprehend a spoken dialogue in the target language,
2. identify the present, past and future tenses in a written paragraph,
3. interpret cultural behavior.

**SPECIAL EDUCATION – SPEDU**

The 3 learning outcomes below are valid for the degree and certificate in Special Education.

**Associate in arts degree**
Special education paraeducator/instructional assistant

**Certificate of achievement**
Special education paraeducator/instructional assistant

Students completing the program will be able to...
1. analyze state and federal legislation pertaining to general and special education,
2. use a variety of instruction strategies and materials that respect individual differences,
3. demonstrate an understanding of how culture affects relationships among children, families, and schooling.

**SPEECH – SPCH**

The 5 learning outcomes below are valid for the degree and certificate in Communication Studies.

**Associate in arts degree**
Communication studies

**Certificate of achievement**
Communication studies

Students completing the program will be able to...
1. recognize the cultural, ethical, political, psychological and practical aspects of communication systems and models,
2. develop and present effective informative and persuasive presentations, becoming more capable, responsible speakers,
3. demonstrate an understanding of the role critical thinking plays in the effective analysis and development of informative and persuasive messages,
4. demonstrate an understanding of interpersonal communication theory and practice the skills necessary for effective interpersonal interactions,
5. demonstrate an understanding of a personal empowerment and responsibility.

TRANSFER STUDIES – CSU

Certificate of achievement
CSU general education breadth

Students completing the program will be able to...
1. communicate effectively, both verbally and in writing,
2. critically analyze and solve problems using the appropriate technique for the issue at hand, including appropriate use of logic, mathematics, multi-disciplinary, and cultural considerations where applicable,
3. critically examine the function, media, subject matter, organization, aesthetic, style, and relative excellence of representative examples of the arts, literature, philosophy, and foreign languages including approaches from various historical, cultural, and gender-based origins,
4. develop an understanding of the information available, the perspectives and approaches of the physical, biological, social and behavioral sciences, appreciating the power and limits of these methods of inquiry and both individual, ethical, and societal responsibilities,
5. organize and present information in person in a logical and understandable manner.

TRANSFER STUDIES – IGETC

Certificate of achievement
Intersegmental general education transfer curriculum - IGETC

Students completing the program will be able to...
1. communicate effectively, both verbally and in writing,
2. critically analyze and solve problems using the appropriate technique for the issue at hand, including appropriate use of logic, mathematics, multi-disciplinary, and cultural considerations where applicable,
3. critically examine the function, media, subject matter, organization, aesthetic, style, and relative excellence of representative examples of the arts, literature, philosophy, and foreign languages including approaches from various historical, cultural, and gender-based origins,
4. develop an understanding of the information available, the perspectives and approaches of the physical, biological, social and behavioral sciences, appreciating the power and limits of these methods of inquiry and both individual, ethical, and societal responsibilities,
5. organize and present information in person in a logical and understandable manner.
6. demonstrate proficiency in a language other than English, and knowledge of the associated history and culture, at the level expected from two years of high school study (for UC transfer).

Check www.dvc.edu/slo for the latest updates to our program level student learning outcomes.
Section five

PROGRAM 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 classes 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 classes 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 course that is offered less than full-term, 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.

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](http://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.

Program Level Student Learning Outcomes
Program level student learning outcomes have been developed for each of the three Options for General Education. A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: [www.dvc.edu/slo](http://www.dvc.edu/slo) for the most current information.
ACCOU luiNG
See Business Accounting - BUSAC

ADDICTION STUDIES – ADS

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

Biological and Health Sciences Division
Dennis Smith, Dean
Science Center 100
925-685-1230 ext. 2359

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.

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

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 higher. Some courses may satisfy both major and other graduation requirements, 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.

major requirements

<table>
<thead>
<tr>
<th>Course</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>
<tr>
<td>total minimum required units</td>
<td>37.5</td>
</tr>
</tbody>
</table>

*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 term. 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 term. Verify offerings with college counselors, program faculty, and the online schedule of classes. Students starting the program in a spring or summer term should meet with a counselor or program advisor to plan their schedule.
Addiction counseling course sequence

\[ X = \text{term offered} \]
recommended sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Year</th>
<th>Units</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 101</td>
<td>1st year</td>
<td>3</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>ADS 102</td>
<td>1st year</td>
<td>3</td>
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<tr>
<td>ADS 103</td>
<td>2nd year</td>
<td>2</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>ADS 151</td>
<td>1st year</td>
<td>1.5</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>ADS 152</td>
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<td>3</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>ADS 154</td>
<td>1st year</td>
<td>3</td>
<td></td>
<td>X</td>
<td></td>
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<tr>
<td>ADS 155</td>
<td>2nd year</td>
<td>3</td>
<td></td>
<td>X</td>
<td></td>
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<tr>
<td>ADS 163</td>
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<td>3</td>
<td></td>
<td>X</td>
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<tr>
<td>ADS 168</td>
<td>2nd year</td>
<td>2</td>
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<td>ADS 171</td>
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<td>X</td>
</tr>
<tr>
<td>ADS 172</td>
<td>3rd year</td>
<td>5.5</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

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.

Some courses may satisfy both major and other graduation requirements, 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 higher.

major requirements units

<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 102</td>
<td>Introduction to Motivational Interviewing Skills</td>
<td>3</td>
</tr>
<tr>
<td>ADS 152*</td>
<td>Relapse Prevention</td>
<td>3</td>
</tr>
<tr>
<td>ADS 154*</td>
<td>Dual Disorders</td>
<td>3</td>
</tr>
<tr>
<td>ADS 155</td>
<td>Diverse Communities and Social Services</td>
<td>3</td>
</tr>
<tr>
<td>ADS 163</td>
<td>Pharmacology and Medical Aspects of Alcohol and Other Drugs</td>
<td>3</td>
</tr>
<tr>
<td>ADS 170</td>
<td>Introduction to Codependency and Family Issues</td>
<td>3</td>
</tr>
</tbody>
</table>

total minimum required units 21

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 higher. Required courses are primarily available in the evening and late afternoon. Although students may start during any term and progress at their own pace, completion of the certificate will take approximately four terms.

*The above courses have specific prerequisites. See course descriptions for details.
required courses units
ADS 101 Introduction to Substance Abuse and Treatment ........................................ 3
ADS 102 Introduction to Motivational Interviewing Skills ........................................ 3
ADS 103* Group Process .................................................. 2
ADS 151* Ethical and Legal Concerns for Addiction Counselors .............................. 1.5
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 168* Group Leadership .............................................. 2
ADS 170 Introduction to Codependency and Family Issues ...................................... 3
ADS 171* ADS Field Work I ................................................ 5.5
ADS 172* ADS Field Work II ............................................. 5.5

*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 Counseling above.

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

Important note: Once this certificate is completed, if you choose to continue in the addiction studies program, you may apply these units towards the more in-depth addiction counseling certificate. When a student has enough units to earn either certificate, they need to fill out an “application for a certificate” form during the term in which they will complete the units. This form must be picked up 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 higher. Required courses are primarily available in the evening and late afternoon. Although students may start during any term and progress at their own pace, completion of the certificate requirements will take a minimum of two terms.

required courses units
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

*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-101** Introduction to Substance Abuse and Treatment

3 units SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
This course provides basic core knowledge and theories about addiction, treatment, and public policy. CSU

**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
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 classes. 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

This course explores the research that describes the progressive and predictable warning signs of relapse in addicts and alcoholics. Students will study and practice the 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-156 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 per term
- Prerequisite: ADS 101 and ADS 102 or equivalents
- Note: Formerly a seven unit block consisting of ADS 169, CARER 130, and COOP 170A. It is highly recommended that a student have at least 10 units completed in the addiction studies program before entering the Field Work class.

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 first-hand 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 per term
- Prerequisite: ADS 171 or equivalent
- Co-requisite: ADS 151 or equivalent (may be taken previously)
- 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. This 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

**ADS-299  Student Instructional Assistant**

.5-3 units SC

- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

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**ADMINISTRATION OF JUSTICE – ADJUS**

Social Sciences Division
Lyn Krause, Dean
Faculty Office 136
925-685-1230 ext. 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.

**Program level student learning outcomes**

A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: [www.dvc.edu/slo](http://www.dvc.edu/slo) for the most current information.

**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 higher. Degree requirements can be completed by attending classes in the day, the evening, or both. Some courses may satisfy both major and other graduation requirements; however the units are only counted once.

**major requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ADJUS 120</td>
<td>Introduction to the Administration of Justice</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 121</td>
<td>Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 122</td>
<td>Criminal Procedure</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 124</td>
<td>Elements of Corrections</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 130</td>
<td>Police Multicultural Relations</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 221</td>
<td>Criminal Evidence</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 284</td>
<td>Interviewing and Counseling</td>
<td>3</td>
</tr>
</tbody>
</table>
plus at least 7-9 units from:
ADJUS 125 Report Preparation for Criminal Justice .......... 3
ADJUS 139 Gangs and Threat Groups in America .......... 3
ADJUS 203 Physical Evidence and the Crime Laboratory .................................................. 4
ADJUS 222 Criminal Investigation ............................................. 3
ADJUS 230 Juvenile Procedures ............................................. 3
ADJUS 260 Patrol Procedures ............................................. 3
ADJUS 270 Personal Self-Defense and Firearms .......... 2
ADJUS 280 Probation and Parole ............................................. 3
ADJUS 298 Independent Study ............................................. 3

total minimum required units 28

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 enforcement, 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 higher. Certificate requirements can be completed by attending classes in the day, the evening or both.

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

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

total minimum required units 28

Certificate of accomplishment - Administration of justice - Community relations specialist
This certificate prepares students for entry-level careers in corrections such as working in prisons, jails, probation officers, parole agent, 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 higher. 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.

required courses units
ADJUS 120 Introduction to the Administration of Justice ............................................. 3
ADJUS 130 Police Multicultural Relations ............................................. 3
ADJUS 139 Gangs and Threat Groups ............................................. 3

plus at least 3 units from:
ADJUS 280 Probation and Parole ............................................. 3
ADJUS 284 Interviewing and Counseling ............................................. 3

total minimum required units 12

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 agent, 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 higher. 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.

required courses units
ADJUS 120 Introduction to the Administration of Justice ............................................. 3
ADJUS 124 Elements of Corrections ............................................. 3
ADJUS 139 Gangs and Threat Groups ............................................. 3
ADJUS 284 Interviewing and Counseling ............................................. 3

total minimum required units 12
Certificate of accomplishment - Administration of justice - Crime scene investigator

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

To earn a certificate of accomplishment, students must complete each course used to meet a certificate requirement with a “C” grade or higher. 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 203 Physical Evidence and the Crime Lab</td>
<td>4</td>
</tr>
<tr>
<td>ADJUS 222 Criminal Investigation</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 260 Patrol Procedures</td>
<td>3</td>
</tr>
<tr>
<td><strong>total minimum required units</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

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 higher. 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 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>
<td>3</td>
</tr>
<tr>
<td><strong>total minimum required units</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

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 higher. 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 124 Elements of Correction</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 139 Gangs and Threat Groups in America</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 230 Juvenile Procedures</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 284 Interviewing and Counseling</td>
<td>3</td>
</tr>
<tr>
<td><strong>total minimum required units</strong></td>
<td><strong>15</strong></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 higher. 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>
</tbody>
</table>
ADJUS 222  Criminal Investigation................................. 3
ADJUS 260  Patrol Procedures ........................................ 3
ADJUS 270  Defensive Tactics and Firearms......................... 2

total minimum required units  17

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. CSU, UC

ADJUS-121  Criminal Law
3 units  SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
- Note: Credit by examination option available
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. CSU, UC

ADJUS-122  Criminal Procedure
3 units  SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
- Note: Credit by examination option available
This course examines in detail the legal processes from pre-arrest, arrest through trial, sentencing and correctional procedures; a review of the history of case and common law; conceptual interpretations of law as reflected in course decisions; a study of case law methodology and case research as the decisions impact upon the procedures of the justice system. California law and procedures are emphasized. CSU

ADJUS-124  Elements of Corrections
3 units  SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
An introduction to major types of criminal behavior, patterns of career offenders, causal factors of crime and delinquency, and methods used in dealing with violators in the justice system. Emphasis will be placed on changing roles in corrections as practiced by law enforcement, courts, and correctional agencies. CSU

ADJUS-125  Report Preparation for Criminal Justice
3 units  SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
- Note: Credit by examination option available
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, memoranda, directives 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
- Note: Credit by examination option available
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 course combines the theoretical concepts associated with use of physical evidence in the forensic setting with student involvement in the processing of simulated crime scenes. The lab component, which will focus on the student applying the principles learned in lectures, will be mandatory. CSU

ADJUS-221 Criminal Evidence
3 units SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
- Note: Credit by examination option available
This course covers the 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 SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
- Note: Credit by examination option available
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. CSU

ADJUS-230 Juvenile Procedures
3 units LR
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
- Note: Credit by examination option available
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
- Note: Credit by examination option available
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 conviction 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 SC
- 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. Specific emphasis will be on California’s probation, institutions 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
ADJUS-299  Student Instructional Assistant
0.5-3 units  SC
• May be repeated three times
• Variable hours
• Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

ANTHR-120  Magic, Witchcraft, and Religion in the Americas
3 units  SC
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent

A cross-cultural, multicultural examination of the forms and functions of supernatural belief systems and associated rituals that have developed in various societies in the Americas. Basic ethnographic and archaeological concepts and methodologies will be introduced and applied to the assessment and analysis of selected New World cultural/religious traditions. Emphasis will be placed on understanding religious belief systems within their given social contexts. The course will also provide a comparative assessment of the major prehistoric and historic social and religious patterns that developed in the Americas, and will include a cross-cultural comparison of the social and religious traditions that developed within various Native American, African American, Latino/Hispanic American, and Euro-American communities in order to illustrate major systems types and to provide insight into the general functions of religious belief and ritual in human life. CSU, UC

ANTHR-125  Introduction to Archaeology and Prehistory
3 units  SC
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent

An introduction to archaeological methods and the study of prehistory. Course will deal with field work techniques, the classification and interpretation of artifacts, theory in archaeology and prehistory, and will introduce students to the key developments in the study of human prehistory. Emphasis will be given to the study of the prehistoric inhabitants of the San Francisco Bay Region. 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  SC
• 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. 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. CSU, UC

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

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

ANTHR-155 Topics in Anthropology
.3-4 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 class schedule. CSU

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

ANTHR-299 Student Instructional Assistant
.5-3 units SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.
Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

ARABIC – ARABC

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

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 classes. CSU

**ARABC-299 Student Instructional Assistant**  
.5-3 units SC  
- May be repeated three times  
- Variable hours  
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

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**ARCHITECTURE – ARCHI**

Physical Sciences and Engineering Division  
Dennis Smith, Dean  
Physical Science Building 263  
925-685-1230 ext. 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.

**Program level student learning outcomes**  
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: [www.dvc.edu/slo](http://www.dvc.edu/slo) for the most current information.

**Associate in science degrees**  
- Architecture design  
- Architecture technology

**Certificate of achievement**  
- Architecture technology

**Associate in science degree - Architecture design**  
Students in the architectural design program will develop the necessary skills to analyze, modify or create architectural space and the abilities to present their ideas in graphic form using a variety of media. The program emphasizes spatial and architectural theories relating to design, architectural history, and methods of graphic composition and presentation.

The DVC Architecture Design major is intended for transfer. Students who intend to transfer must consult with a program advisor or counselor to ensure that the requirements for transfer to four-year institutions of their choice are met. Students who intend to transfer are advised to select General Education Option 2 (IGETC) or Option 3 (CSU Breadth). Option 1 (DVC General Education) is not generally advised.
To earn an associate in science degree with a major in architecture design, students must complete each course used to meet a major requirement with a grade of “C” or higher, maintain an overall GPA of 2.5 or higher and complete all graduation requirements as listed in the catalog. Many upper level architecture degree programs require specific physics, math and general education preparation. Please consult the transfer institution for required courses. Some courses may satisfy both major and other graduation requirements; however the units are only counted once.

**major requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ARCHI 120</td>
<td>3</td>
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<tr>
<td>ARCHI 121</td>
<td>4</td>
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<td>ARCHI 130</td>
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<td>ARCHI 131</td>
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<td>ARCHI 222</td>
<td>3</td>
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<td>CONST 144</td>
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**plus at least 3 units from:**

<table>
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<tr>
<th>Course</th>
<th>Units</th>
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<tr>
<td>ARCHI 105</td>
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<tr>
<td>ARCHI 156</td>
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<tr>
<td>ARCHI 157</td>
<td>3</td>
</tr>
<tr>
<td>ARCHI 160</td>
<td>3</td>
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</table>

**total minimum required units** 33

**recommended elective:**

<table>
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<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ARCHI 207</td>
<td>3</td>
</tr>
</tbody>
</table>

**Certificate of achievement - Architecture technology**

This program offers students the opportunity to earn a certificate of achievement in architecture technology, which prepares students for a career as an architectural intern, draftsman or designer. As an architecture technology student, students gain an in-depth understanding of the requirements and skills necessary for employment in an architect’s office.

Architectural interns, draftsmen or designers 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. Graduates with these skills are also employed by landscape architects, industrial designers, and engineers.

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

**required courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>ARCHI 120</td>
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<td>CONST 135</td>
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<tr>
<td>CONST 144</td>
<td>3</td>
</tr>
</tbody>
</table>

**Enrollment Information**

This program is available day and night. Please consult the catalog for specific details regarding course offerings and requirements.
plus at least 6 units from:
ARCHI 160  History of American Architecture.................. 3
CONST 116  Plane Surveying........................................ 3
CONST 181  Building Code Interpretation:
             Non Structural........................................... 3
CONST 183  Title 24: Energy Conservation Codes ............ 3
COOP 170A  Internship in Occupational Work Experience
             Education.......................................................... 2-3
ENGIN 226  Computer Aided Drafting Design, Advanced
             Concepts - AutoCAD............................................. 4

total minimum required units 29

ARCHI-105  Architectural Assembly and Fabrication
.67 unit   SC
• 36 hours laboratory per term
Course covering methods of fabrication for architectural projects in metal, wood, plastic and other materials. Introduction to shop safety, machine and tool operation and small scale design and construction. CSU

ARCHI-119  Introduction to Technical Drawing
3 units   SC
• 36 hours lecture/72 hours laboratory/36 hours laboratory by arrangement per term
• Note: Same as ENGIN 119. For students with no previous drafting experience. Credit by examination option available.
Introduction to the use of technical drawing tools, technical lettering and line work, geometric construction, sketching and shape description, orthographic projection, dimensioning, section views, auxiliary views and pictorials. Introduction to the use of computers to produce technical drawings. CSU

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
• Note: Credit by examination option available.
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 architectonic space, material qualities, and precedent studies. CSU, UC (credit limits may apply to UC - see counselor)

ARCHI-126  Computer Aided Design and Drafting - AutoCAD
4 units   SC
• May be repeated once
• 54 hours lecture/54 hours laboratory/36 hours laboratory by arrangement per term
• Recommended: ARCHI 119 or ENGIN 119 or equivalent
• Note: Same as ENGIN 126. May be repeated once when software changes. Credit by examination option available.
Introductory course covering the computer application AutoCAD as it relates to the creation of technical drawings. Course covers two dimensional computer aided drafting of objects in orthographic projection. Hands-on training utilizing a comprehensive overview of the software package and its applications in architectural drafting is stressed. Students are recommended to have a basic knowledge of technical drawing. 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
• Recommended: ARCHI 119 or ENGIN 119 or equivalent
An introduction to architectural graphics related to projection systems, the representation of architectural forms, rendering and shadow casting. Course covers a series of lectures on the history of architectural rendering, methods of graphic representation used by architects, and assignments introducing problem solving in orthographic and pictorial projection and drafting, architectural lettering, shades and shadows and color rendering techniques. Emphasis on mechanical drafting with pencil and beginning introduction to other art media. CSU, UC (credit limits may apply to UC - see counselor)
ARCHI-131 Architectural Graphics II
4 units SC
- 54 hours lecture/36 hours laboratory by arrangement per term
- Prerequisite: ARCHI 130 or equivalent
Advanced exploration of drawing techniques utilizing freehand and mechanical drawing methods of representation. Emphasis on perspective drawing, shade and tone, 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
Advanced exploration of drawing and rendering techniques utilizing freehand drawing, mechanical drawing and contemporary methods of representation. Emphasis on perspective drawing, shade and tone, color in architectural renderings, and advanced representation of materials, textures and landscape elements. Course covers advanced topics in the use of mixed media, presentation formats, layout and composition in relation to architectural rendering. 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 to provide a study of current concepts and problems in architecture. Specific topics to be announced in the schedule of classes. 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 ancient civilizations to the present. Course discusses architectural building types in relation to their geographic and cultural context. Topics covered include architecture of early settlements and civilizations, megalithic monuments, and Egyptian, Greek and Roman architecture, as well as a history of architecture during the Middle Ages, including Byzantine, Romanesque and Gothic movements in design. Course concludes with architectural developments during the Renaissance and later design developments in relation to technology, industrialization and the social and cultural context of the twentieth century, including architecture of the Modernist Movement and Deconstructivism. CSU, UC (credit limits may apply to UC - see counselor)

ARCHI-156 History of World Architecture: Early Civilizations to Middle Ages
3 units SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
- Note: ARCHI 156, 157 and 158 may be taken in any order
Architecture and urbanism from prehistory to the Middle Ages. Social, cultural, and physical conditions that influenced the built environment in the Mediterranean region, Europe, Asia, Africa, and Pre-Columbian Americas. Topics include early megalithic tombs and structures, Native American dwellings, architecture of Egypt, Mesopotamia, Persia and the Middle East, early civilizations of the Aegean, temples and cities of Greece, architecture and engineering of Rome, and early medieval structures after the fall of Rome. CSU, UC (credit limits may apply to UC - see counselor)

ARCHI-157 History of Architecture: Middle Ages to 18th Century
3 units SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
- Note: ARCHI 156, 157 and 158 may be taken in any order
World architecture and urbanism from the Middle Ages until the end of the 18th century. Exploration of social, cultural, and physical conditions that influence the built environment of Europe, Asia and the Colonial Americas. Course covers the development of the Gothic cathedral, art and architecture of the Renaissance, Baroque design in Europe, architecture of Japan, China and India, historic buildings in Colonial America, and architectural developments in Europe during the 18th century including Romanticism and later Greek and Gothic revival movements. CSU, UC (credit limits may apply to UC - see counselor)

ARCHI-158 History of World Architecture: 18th Century to Present
3 units SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
- Note: ARCHI 156, 157 and 158 may be taken in any order
Architecture and urbanism of the modern world, from the 18th century to the present. Exploration of social, cultural, and physical conditions influencing the built environment
of Europe, Asia, and the Americas. Course covers American architectural contributions of Frank Lloyd Wright and the Chicago School of Architecture, Art Nouveau and the work of Gaudi with in depth discussion of the influence of industrialization in architecture as well as topics in Russian Constructivism, 20th Century Modernism, Post-modernism and Deconstructivism. CSU

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, 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 covered include Native American dwellings, early Colonial houses and structures, the Georgian and Federal Styles, the planning of Washington DC, Greek, Gothic and other European Revival movements in the United States, as well as the development of the high rise in major metropolitan areas such as Chicago and New York. Material related to the lives and work of noted architects such as Louis Sullivan, Frank Lloyd Wright, Julia Morgan and Bernard Maybeck are presented in relation to their social, political and economic contexts. CSU, UC (credit limits may apply to UC - see counselor)

ARCHI-207 Environmental Control Systems
3 units SC
- 54 hours lecture per term
- Recommended: MATH 110 or equivalent
Course covering the use of environmental control systems in buildings, including heating, cooling and ventilation. Topics include the use of passive solar techniques, cross and stack ventilation, daylighting methods and an introduction to mechanical systems for environmental control in buildings. Emphasis on green building technology and sustainable practices in design of environmental control systems. CSU

ARCHI-220 Architectural Design II
3 units LR
- 36 hours lecture/108 hours laboratory per term
- Prerequisite: ARCHI 121 and 130 or equivalent
Second level studio 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 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 Practice and Working Drawings I
3 units SC
- 36 hours lecture/72 hours laboratory per term
- Recommended: ARCHI 130 or equivalent
Course covers the methods and processes for the interpretation and creation of architectural working drawings and specifications. Topics covered include schematic design, design development, assembly and graphic representation of building elements and the creation of architectural drawings and construction documents. Site plans, foundations, framing systems, bearing walls, structural frames, electrical and mechanical systems in addition to details and cladding systems for floors, walls and roofs are included in course curriculum. Discussion of the CSI format and use of reference material such as local planning ordinances, building codes, architectural graphic standards, and information published by building product manufacturers are included in course curriculum. Students are introduced to the design review process, standards of practice and graphic representation, and the role of the architect, client and local governing agencies. CSU

ARCHI-223 Architectural Practice and Working Drawings II
3 units SC
- 36 hours lecture/72 hours laboratory per term
- Recommended: ARCHI 222 or equivalent
Preparation and interpretation of architectural working drawings and specifications, with emphasis on heavy timber, concrete, masonry, and steel construction. Use of reference material such as local planning ordinances, building codes, architectural graphic standards, and information published by building product manufacturers. CSU
ARChI-226  Computer Aided Drafting Design, Advanced Concepts - AutoCAD

4 units  SC
- May be repeated once
- 54 hours lecture/54 hours laboratory/36 hours laboratory by arrangement per term
- Recommended: ARChI 126 or ENGIN 126 or equivalent
- Note: Same as ENGIN 226

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

.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 beyond courses offered.

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

ARChI-299  Student Instructional Assistant

.5-3 units  SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

ART-105  Introduction to Drawing, Color, and Two Dimensional Design

3 units  SC
- May be repeated once
- 36 hours lecture/72 hours laboratory per term
- Recommended: Eligibility for ENGL 116/118 or equivalent
- Note: ART 105A and 105B combined are equal to ART 105

Presentation of drawing concepts and techniques, perspective, as well as color theory fundamentals, with emphasis on design principles and composition. CSU, UC

ART-105A  Introduction to Drawing

1.5 units  SC
- May be repeated once
- 18 hours lecture/36 hours laboratory per term
- Recommended: Eligibility for ENGL 116/118 or equivalent
- Note: ART 105A is equivalent to the first half of ART 105. ART 105A and 105B may be taken in reverse order.
- Formerly ART 100

Presentation of fundamentals of drawing and composition and the basic application thereof. CSU, UC

ART-105B  Introduction to Color

1.5 units  SC
- May be repeated once
- 18 hours lecture/36 hours laboratory per term
- Recommended: Eligibility for ENGL 116/118 or equivalent
- Note: ART 105B is equivalent to the second half of ART 105. ART 105A and 105B may be taken in reverse order.
- Formerly ART 101

Presentation of the fundamentals of color theory, color function, and color application. CSU, UC

ART-106  Drawing and Composition

3 units  SC
- May be repeated once
- 36 hours lecture/72 hours laboratory per term
- Recommended: ART 105 or equivalent; eligibility for ENGL 116/118 or equivalent

An exploration of drawing concepts, descriptive drawing, and logical form rendering with an emphasis on stylistic development. Students will explore additional color media such as pastel and Prismacolor pencils. CSU, UC

Possible career opportunities

Career options include professions engaged in creating works of art as an artist, painter, sculptor, ceramist, engraver, printmaker, metal smith, illustrator, designer, muralist, and jeweler. Some careers requiring an education beyond the associate degree include: art critic, art dealer, educator, historian, arts administrator, advertising specialist, computer graphics illustrator, display designer, gallery director, and visual information specialist.
ART-106A  Drawing and Composition: Controlled  
1.5 units  SC  
- May be repeated once  
- 18 hours lecture/36 hours laboratory per term  
- Recommended: ART 105A or equivalent; eligibility for ENGL 116/118 or equivalent  
- 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 graphite, charcoal, and conte. CSU, UC

ART-106B  Drawing and Composition: Expressive  
1.5 units  SC  
- May be repeated once  
- 18 hours lecture/36 hours laboratory per term  
- Recommended: ART 105A or equivalent; eligibility for ENGL 116/118 or equivalent  
- Note: ART 106B is the second half of ART 106  

Techniques of drawing, descriptive drawing, and creative composition through the employment of traditional drawing media. May explore additional color media, such as pastel and Prismacolor pencils. CSU, UC

ART-107  Figure Drawing I  
3 units  SC  
- May be repeated once  
- 36 hours lecture/72 hours laboratory per term  
- Recommended: ART 105 or ART 106 or equivalents; eligibility for ENGL 116/118 or equivalent  

Drawing from the human figure with emphasis on the traditional drawing media of pencil, charcoal, and ink. 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 ART 106 or equivalent and ART 107 or equivalent; eligibility for ENGL 116/118 or equivalent  

Drawing from the human figure. Emphasis on mixed media: pastels, gouache, and watercolor. CSU, UC

ART-109  Printmaking: Monotype  
3 units  SC  
- May be repeated once  
- 36 hours lecture/72 hours laboratory per term  
- Recommended: ART 105 or equivalent, or ART 106 or equivalent  

An exploration of monotype (single image) processes utilizing a painterly approach to printmaking. Emphasis on traditional and contemporary methods. CSU, UC

ART-110  Introduction to Printmaking  
3 units  SC  
- May be repeated once  
- 36 hours lecture/72 hours laboratory per term  
- Recommended: ART 105 or equivalent  

An introduction to various printmaking techniques: Monotype, Collagraph, Dry Point, Linoleum Cut. 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, deepbite, multiple color plates, and chine colle. Projects and discussions develop students’ understanding of how images can communicate our experience and imagination. 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 or equivalent  
- Note: ART 120A and 120B combined are equivalent to ART 120  

A study of the materials and techniques of watercolor painting with emphasis on learning techniques, problem solving, concept development, and skills demonstration. CSU, UC

ART-120A  Introduction to Watercolor  
1.5 units  SC  
- May be repeated once  
- 18 hours lecture/36 hours laboratory per term  
- Recommended: Eligibility for ENGL 116/118 or equivalent  
- 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 or equivalent  
- Note: ART 120B is equivalent to the second half of ART 120; and 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 or equivalent

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 or equivalent

The study, practice, and analysis of color theory as it affects formal and conceptual elements in 2-D media. A variety of painting mediums will be used, as well as electronic media. CSU, UC

ART-126 Oil/Acrylic Painting I
3 units SC
- May be repeated once
- 36 hours lecture/72 hours laboratory per term
- Recommended: ART 105 or equivalent; eligibility for ENGL 116/118 or equivalent
- Note: ART 126A is equivalent to the first half of ART 126

A study of the materials and techniques of oil and acrylic painting for the beginning student. CSU, UC

ART-126A Introduction to Oil/Acrylic Painting A
1.5 units SC
- May be repeated once
- 18 hours lecture/36 hours laboratory per term
- Recommended: ART 105 or equivalent; eligibility for ENGL 116/118 or equivalent
- Note: ART 126A is equivalent to the second half of ART 126

Course designed for the student who has had no experience with oil/ acrylic painting. The emphasis of the class is on basic painting techniques. Specific assignments are designed to enable students to achieve basic goals. CSU, UC

ART-126B Introduction to Oil/Acrylic Painting B
1.5 units SC
- May be repeated once
- 18 hours lecture/36 hours laboratory per term
- Recommended: ART 105 or equivalent; ART 126A or equivalent; eligibility for ENGL 116/118 or equivalent
- Note: ART 126B is equivalent to the second half of ART 126

This course deals with painting as a means of communication and the practical study of established styles and techniques. Emphasis will be upon traditional materials and techniques including direct and indirect methods. CSU, UC

ART-127 Oil/Acrylic Painting II
3 units SC
- 36 hours lecture/72 hours laboratory per term
- Recommended: ART 105 or equivalent, ART 125, and ART 126 or equivalent; eligibility for ENGL 116/118 or equivalent

This course is an intermediate level painting class. This course provides students with painting projects designed to further enhance techniques, technical skills, and problem solving abilities. CSU, UC

ART-128 Symbols and Visions
3 units SC
- May be repeated once
- 36 hours lecture/72 hours laboratory per term
- Recommended: ART 105 or equivalent, ART 125, ART 126 or equivalent, and ART 127 or equivalent; eligibility for ENGL 116/118 or equivalent

A course designed to develop the artist’s imagination. Presentations of ideas and themes of historic and contemporary painting concerns will be made, with emphasis on the conceptualization of imagery. CSU, UC

ART-129 Advanced Painting
3 units SC
- 36 hours lecture/72 hours laboratory per term
- Recommended: ART 105, ART 125, ART 126, ART 127, and ART 128 or equivalents; eligibility for ENGL 116/118 or equivalent

This course is an advanced level painting class. Approaches to painting issues concerning subject matter, composition, and expression will be studied. This course is designed to develop the artist’s portfolio with a cohesive and thematic series of paintings. CSU, UC

ART-135 Art Gallery/Museum Management
3 units SC
- 36 hours lecture/72 hours laboratory per term
- Recommended: Eligibility for ENGL 116/118 or equivalent

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, framing, exhibition design, conservation, advertising, and legal issues will be addressed. Students will develop professional skills needed to interact within art and related business environments. Off-campus professional internships may be possible upon completing this class. CSU
ART-140  Introduction to Sculpture and 3-D Design
3 units SC
• May be repeated once
• 36 hours lecture/72 hours laboratory per term
• Recommended: Eligibility for ENGL 116/118 or equivalent
A hands-on introduction to the basic elements of three-dimensional design and sculpture. Students comprehend form, volume, and spatial relationships through hands-on projects in a variety of media. Students also survey the history of 20th century sculpture as a basis for exploring and understanding three-dimensional design fundamentals. CSU, UC

ART-141  Sculpture I
3 units SC
• May be repeated once
• 36 hours lecture/72 hours laboratory per term
• Recommended: ART 140 or equivalent
As a continuation of ART 140, this course consists of hands-on projects that guide students through processes and principles of three dimensional design. Students develop a conceptual dialogue with the instructor, and create a portfolio of sculptural work. CSU, UC

ART-142  Metal Art I
3 units SC
• May be repeated once
• 36 hours lecture/72 hours laboratory per term
• Recommended: ART 140 or equivalent
This course is a comprehensive introduction to various metal sculpture processes. This course applies mold-making techniques for casting bronze, aluminum, and iron objects, as well as basic welded sculpture. Emphasis will be on 3-D design quality and process. CSU

ART-143  Metal Art II
3 units SC
• May be repeated once
• 36 hours lecture/72 hours laboratory per term
• Recommended: ART 140 or equivalent and ART 142 or equivalent
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 and welding. Emphasis will be on advanced design and technique 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 or equivalent
This course introduces various aspects of metal sculpture using casting techniques. Moldmaking techniques for castings in bronze, aluminum, and iron are introduced. An in-depth study of traditional and contemporary metal sculpture processes with an emphasis on 3-D design quality are established. CSU

ART-145  Metal Casting Techniques II
3 units SC
• May be repeated once
• 36 hours lecture/72 hours laboratory per term
• Recommended: ART 140 or equivalent and ART 144 or equivalent
This course expands on foundry casting skills 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 burnout investment molds, and shell molds are covered. Emphasis added to sustainable studio practice and design concerns. CSU

ART-146  Metalsmithing and Jewelry I
3 units SC
• May be repeated once
• 36 hours lecture/72 hours laboratory per term
• Recommended: ART 146 or equivalent
This is a beginning course providing skills in 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, moldmaking, alternative casting, Mokume Gane, and reticulation are introduced along with emphasis of individual design and concept. CSU
ART-150  Topics in Studio Art
3-4 units  SC
- May be repeated three times
- Variable hours
- Recommended: Eligibility for ENGL 116/118 or equivalent

This is a supplemental course in studio art topics to provide a study of current concepts and problems in studio art. Specific topics will be announced in the schedule of classes. CSU

ART-152  Wheel Thrown Ceramic Art
3 units  SC
- May be repeated once
- 36 hours lecture/72 hours laboratory by arrangement per term
- Recommended: Eligibility for ENGL 122 or equivalent

Students will explore the history of ceramic art which every civilization has used to record, innovate and advance human achievement. In this course students will examine various western and non-western cultures, learn the fundamentals of three-dimensional design and develop a vocabulary of aesthetic terms and theories for both critical discussion and creative application utilizing the potter’s wheel. CSU, UC

ART-153  Wheel-Thrown Ceramic Art II
3 units  SC
- May be repeated once
- 36 hours lecture/72 hours laboratory per term
- Recommended: ART 152 or equivalent; eligibility for ENGL 116/118 or equivalent

Through the examination of historical and contemporary ceramic genres and the development of advanced technical skills, students will construct complex, wheel-thrown forms. The fundamentals of three-dimensional design will be used to develop a personal aesthetic, and also to guide critique of finished forms. CSU, UC

ART-154  Hand-Built Ceramic Art
3 units  SC
- May be repeated two times
- 36 hours lecture/72 hours laboratory per term
- Recommended: Eligibility for ENGL 116/118 or equivalent

Students will analyze both contemporary and historical art, and reference different aesthetics to construct original hand-built ceramic work. In addition, they will utilize the fundamentals and aesthetics of three-dimensional design to plan, construct, and discuss original work made in class. CSU, UC

ART-155  The Art of Ceramic Sculpture
3 units  SC
- May be repeated once
- 36 hours lecture/72 hours laboratory by arrangement
- Recommended: Eligibility for ENGL 122 or equivalent

Students will explore the art history of ceramic art which every civilization has used to record, innovate and advance human achievement. In this course students will examine various western and non-western cultures, learn the fundamentals of three-dimensional design and develop a vocabulary of aesthetic terms and theories for both critical discussion and creative application producing ceramic sculpture. CSU, UC

ART-156  Figurative Ceramic Art
3 units  SC
- May be repeated two times
- 36 hours lecture/72 hours laboratory per term
- Recommended: Eligibility for ENGL 116/118 or equivalent

Students will analyze both contemporary and historical art, and reference different aesthetics to construct original figurative ceramic work. In addition, they will utilize the fundamentals and aesthetics of three-dimensional design to plan, construct, and discuss original work made in class. CSU, UC

ART-160  Black and White 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. CSU, UC

ART-161  Black and White Photography II
3 units  SC
- May be repeated once
- 36 hours lecture/72 hours laboratory per term
- Recommended: ART 160 or equivalent
- Note: Students supply their own working roll-film camera with manual exposure controls and a lightmeter (either hand held or built into the camera)

Students who have completed this course will demonstrate an intermediate-level knowledge of the materials and techniques used in black and white photography. The course will concentrate on the specific controls of the exposure process, the multiple characteristics of a variety of films and papers, and how to combine the results of different decisions in photography to best realize students’ artistic visions. CSU, UC
ART-162  Black and White Photography III  
3 units  SC  
• 36 hours lecture/72 hours laboratory per term  
• Recommended: ART 161 or equivalent  
• Note: Students supply their own working roll-film camera with manual exposure controls and a lightmeter (either hand held or on camera)  

Students who have completed this course will demonstrate an advanced level of the materials and techniques of black and white photography. Advanced portfolio development and photographic practices will be emphasized. Discussion and critique will be informed by the history of photography and an examination of contemporary art practices. 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  
.3-4 units  SC  
• May be repeated three times  
• Variable hours  

A supplemental course in art to provide a study of current concepts and problems in art. Specific topics will be announced in the schedule of classes. CSU

ART-265  Advanced Photography Workshop  
3 units  SC  
• May be repeated three times  
• 18 hours lecture/90 hours laboratory per term  
• Recommended: ART 160 or equivalent  
• Note: Exploration of digital and darkroom practices encouraged  

This course is 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  
• 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 the faculty. CSU

ART-299  Student Instructional Assistant  
.5-3 units  SC  
• May be repeated three times  
• Variable hours  
• Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.  

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

ART DIGITAL MEDIA – ARTDM

Applied and Fine Arts Division  
Michael Almaguer, Dean  
Humanities Building 112 and 113  
925-685-1230 ext. 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.

Program level student learning outcomes  
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.
**Associate in arts degree**

**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 degree - 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 higher. Required courses are available in the evening and during the day. Some courses may satisfy both major and other graduation requirements; however, the units are only counted once.

**major requirements**

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ART 105</td>
<td>Introduction to Drawing, Color, and 2D Design</td>
<td>3</td>
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<tr>
<td>ARTDM 110</td>
<td>Digital Imaging Process and Technique I</td>
<td>3</td>
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<tr>
<td>ARTDM 111</td>
<td>Digital Imaging Process and Technique II</td>
<td>1.5</td>
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<tr>
<td>ARTDM 130</td>
<td>Introduction to Digital Audio</td>
<td>1.5</td>
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<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>
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<tr>
<td>ARTDM 191</td>
<td>Multimedia Portfolio Development</td>
<td>3</td>
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Choose 8-9 units from one of the following six specialty areas:

**character animation**

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<tr>
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<tbody>
<tr>
<td>ART 107</td>
<td>Figure Drawing I</td>
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<tr>
<td>ARTDM 165</td>
<td>Cartoon Drawing for Digital Animation</td>
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<tr>
<td>ARTDM 170</td>
<td>Multimedia for Web Delivery</td>
<td>3</td>
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**digital audio**

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<tbody>
<tr>
<td>MUSIC 172</td>
<td>Introduction to Electronic Music and MIDI</td>
<td>3</td>
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<tr>
<td>MUSIC 173</td>
<td>Advanced Electronic Music</td>
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<tr>
<td>MUSIC 174</td>
<td>Introduction to Pro Tools</td>
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**digital imaging**

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<tbody>
<tr>
<td>ARTDM 112</td>
<td>Digital Imaging for the Artist</td>
<td>3</td>
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<tr>
<td>ARTDM 115</td>
<td>Digital Imaging Process and Technique III</td>
<td>3</td>
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<tr>
<td>ARTDM 214</td>
<td>Introduction to Graphic Design</td>
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**motion graphics**

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<tr>
<td>ARTDM 140</td>
<td>Motion Graphics for Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 145</td>
<td>Digital Editing</td>
<td>3</td>
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<tr>
<td>ARTDM 170</td>
<td>Multimedia for Web Delivery</td>
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**3D modeling and animation**

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<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>
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<tr>
<td>ARTDM 171</td>
<td>Web Design</td>
<td>3</td>
</tr>
<tr>
<td>COMSC 095</td>
<td>WWW Publishing with HTML</td>
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<tr>
<td>COMSC 096</td>
<td>Advanced WWW Publishing</td>
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**plus at least 9 units from:**

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ART 106</td>
<td>Drawing and Composition</td>
<td>3</td>
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<tr>
<td>ART 107</td>
<td>Figure Drawing I</td>
<td>3</td>
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<tr>
<td>ART 125</td>
<td>Color Theory and Its Application to 2-D Media</td>
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<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>
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</tr>
<tr>
<td>ARTDM 117</td>
<td>Digital Illustration</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 136</td>
<td>Beginning 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>Digital Editing</td>
<td>3</td>
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<tr>
<td>ARTDM 160</td>
<td>3D Modeling and Animation I</td>
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<td>3D Modeling and Animation II</td>
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<td>ARTDM 165</td>
<td>Cartoon Drawing for Digital Animation</td>
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<td>ARTDM 166</td>
<td>Intermediate Cartoon Drawing for Digital Animation</td>
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<tr>
<td>ARTDM 170</td>
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<td>ARTDM 171</td>
<td>Web Design</td>
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<tr>
<td>ARTDM 175</td>
<td>Flash Interactivity</td>
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</tr>
<tr>
<td>ARTDM 214</td>
<td>Introduction to Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 224</td>
<td>Typography</td>
<td>3</td>
</tr>
<tr>
<td>BUS 109</td>
<td>Introduction to Business</td>
<td>3</td>
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<tr>
<td>BUSMG 191</td>
<td>Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>COMSC 095</td>
<td>WWW Publishing with HTML</td>
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<tr>
<td>COMSC 096</td>
<td>Advanced WWW Publishing</td>
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<tr>
<td>COMSC 255</td>
<td>Programming with Java</td>
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<td>COMSC 265</td>
<td>Advanced Programming with C and C++</td>
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<td>L 114</td>
<td>Developing Web Pages for Library Information</td>
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<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>

**total minimum required units**

32

**Note:** There may be no duplication of course units between major specialty area requirements and elective courses.
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 higher. Required courses are available in the evening and during the day.

**required courses** | **units**
--- | ---
ART 105 Introduction to Drawing, Color, and Two-Dimensional 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

plus 8-9 units from one of the 6 specialty areas listed below:

**character animation**
ART 107 Cartoon Drawing for Digital Animation | 3
ARTDM 165 Intermediate 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 Pro Tools | 3

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

**motion graphics**
ARTDM 140 Motion Graphics for Digital Media | 3
ARTDM 145 Digital Editing | 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 | 3
ART 125 Color Theory and Its Application to 2-D Media | 3
ARTDM 112 Digital Imaging for the Artist | 3
ARTDM 115 Digital Imaging Process and Technique III | 3
ARTDM 117 Digital Illustration | 3
ARTDM 136 Beginning Digital Photography | 3
ARTDM 140 Motion Graphics for Digital Media | 3
ARTDM 145 Digital Editing | 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
ARTDM 166 Intermediate Cartoon Drawing for Digital Animation | 3
ARTDM 170 Multimedia for Web Delivery | 3
ARTDM 171 Web Design | 3
ARTDM 175 Flash Interactivity | 3
ARTDM 214 Introduction to Graphic Design | 3
ARTDM 224 Typography | 3
BUS 109 Introduction to Business | 3
BUSMG 191 Small Business Management | 3
COMSC 095 WWW Publishing with HTML | 1
COMSC 096 Advanced WWW Publishing | 1
COMSC 255 Programming with Java | 3
COMSC 265 Advanced Programming with C and C++ | 4
L 114 Developing and Managing Web Pages | 2
MUSIC 172 Introduction to Electronic Music and MIDI | 3
MUSIC 173 Advanced Electronic Music | 3
MUSIC 174 Introduction to Pro Tools | 3

**total minimum required units 32**

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

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 higher. Required courses are available in the evening and during the day.
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:** 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 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:** 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:** ARTDM 111 or equivalent
- **Note:** Course may be repeated only when software is revised

This course introduces students to digital illustration. Students will engage in the production of vector graphics suitable for printing and the web. Emphasis will be given to fundamentals of design and composition. Instruction will utilize a variety of software programs including Adobe Illustrator. 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-136 Beginning Digital Photography
3 units SC
- May be repeated once
- 36 hours lecture/72 hours laboratory per term
- Recommended: ART 160 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: 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 Digital Editing
3 units SC
- 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term

An introduction to the techniques, concepts and aesthetics of digital non-linear, computerized editing for film, television and digital media. The student will become familiar with various professional software programs and develop an understanding of organization, timelines and story as well as editing for visual and audio effect. 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/18 hours laboratory/36 hours laboratory by arrangement per term
- Recommended: ARTDM 110 or equivalent

This course covers the basic concepts of 3D modeling and animation. The fundamentals of computer geometry are taught by looking at the basic elements that make computer models: Cartesian Space, points, curves, surfaces, nurbs, polygons and textures. Students will explore production of three-dimensional computer animation. Modeling, animation, lighting, texture mapping and rendering are introduced. Several hands-on 3D animation projects will be planned, storyboarded, designed, and then produced. CSU

ARTDM-161 3D Modeling and Animation II
3 units SC
- May be repeated once
- 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term
- Recommended: 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. CSU

ARTDM-165 Cartoon Drawing for Digital Animation
3 units SC
- May be repeated once
- 36 hours lecture/36 hours laboratory/18 hours laboratory by arrangement 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 create character animations, script development and storyboard animations. Students will survey the history of animation and be exposed to the techniques of animated drawing. It is designed to prepare students to develop a particular style of animation in any of a wide variety of other digital media 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 165 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: 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 nonlinear, interactive features are emphasized. Publishing multimedia websites will also be covered. The course will also involve hands-on work with a variety of computer work stations and applications. CSU

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: 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: 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, 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 terms. 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, 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: ARTDM 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

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

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

**ARTDM-299 Student Instructional Assistant**
.5-3 units SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU, UC

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**ART HISTORY – ARTHS**

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

Possible career opportunities
Students can pursue careers as curators or archivists at the many museums and galleries across the country. Careers in media, advertising, publishing, fashion or design, as well as art therapy, and working with handicapped or disabled people are also open to art history students. Undergraduate art history majors can pursue advanced training in art history, archaeology, architecture, law, library and information science, business, and education.

**ARTHS-190 Topics in Art History**
.3-4 units SC
- May be repeated three times
- Variable hours
- Recommended: Eligibility for ENGL 116/118 or equivalent

A supplemental course in art history to provide a study of current concepts and problems in art history. Specific topics will be announced in the schedule of classes. CSU

**ARTHS-193 History of Asian Art**
3 units SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 116/118 or equivalent

An introduction to major art forms and traditions in Asia from prehistory to the present. Artists, patrons, cultures, religions, and their intersections will be covered. Comparisons will be drawn between the course material and other artistic traditions, especially Western societies. CSU, UC

**ARTHS-195 History of Prehistoric and Ancient Art**
3 units SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 116/118 or equivalent

A history of Western art from the Paleolithic 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. The social and cultural background of ancient civilizations and role of the artist will be considered. CSU, UC

**ARTHS-196 History of Medieval and Renaissance Art**
3 units SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 116/118 or equivalent

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, socially, culturally, and within patronage systems. 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 or equivalent

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. CSU, UC
ARTHS-199 Contemporary Art History
3 units SC
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent
A survey of contemporary art in the United States and Europe from 1945 to the present. Recent global tendencies in art will also be considered. Emphasis is placed on identifying and understanding important contemporary art movements and images, as well as social and political issues that shape the character of art produced during this time. CSU, UC

ARTHS-299 Student Instructional Assistant
.5-3 units SC
• May be repeated three times
• Variable hours
• Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.
Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

ASTRONOMY

Physical Sciences Division
Dennis Smith, Dean
Physical Science Building 263
925-685-1230 ext. 2359

Possible career opportunities
Considered a branch of physics, astronomy is really a marriage of the physical sciences from planetary science and atmospheric science, to physics and chemistry. Study in astronomy prepares students for careers in scientific research, systems analysis and engineering, as well as software engineering and development. More than two years of college study is usually required.

ASTRO-110 The Visible Universe
3 units LR
• 54 hours lecture per term
• Recommended: MATH 110 or equivalent; eligibility for ENGL 122 or equivalent
Fundamental concepts in astronomy and observational techniques including selected mathematical concepts used in developing an understanding of celestial motions and coordinate systems and their importance to humanity. The planetarium sky is a major learning tool. CSU, UC (credit limits may apply to UC - see counselor)

ASTRO-120 Elementary Astronomy
3 units LR
• 54 hours lecture per term
• Recommended: MATH 110 and 114 or equivalent; eligibility for ENGL 122 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 our current state of knowledge concerning the universe 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
• Prerequisite: ASTRO 110 or 120 or equivalent (may be taken previously)
The laboratory experience will involve the study of the fundamentals of astronomy and will include investigations of the sun, moon, planets, stars and galaxies. Telescopes and other instruments will be used by students to gather data. Students will analyze data they have collected as well as that collected by others. CSU, UC

ASTRO-298 Independent Study
.5-3 units SC
• 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 pursue special interests under the direction of the faculty. CSU
ASTRO-299 Student Instructional Assistant  
.5-3 units SC  
• May be repeated three times  
• Variable hours  
• Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

BIOLOGICAL SCIENCE – BIOSC

Diablo Valley College is approved by the California Board of Registered Nurses for continuing education credits (Provider # CEP 7992). Biological Science courses which can be used are BIOSC 119, 120, 139, 140 and 146.

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.  

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 Laboratory  
4 units SC  
• 72 hours lecture/36 hours laboratory per term  
• Recommended: Eligibility for ENGL 122 or equivalent  
• Note: Not open to students who have taken BIOSC 101

A study of the process of evolution by means of natural selection, cell structure, function and reproduction, plant and animal growth and development, genetics and homeostasis within and among living things, populations and communities. A laboratory component is included that introduces scientific method and experimentation, including data gathering and analysis with a variety of scientific equipment. CSU, UC (credit limits may apply to UC - see counselor)

BIOSC-116 Human Biology  
3 units SC  
• 54 hours lecture per term  
• Recommended: Eligibility for ENGL 122 or equivalent  
• Note: Not open to students who have taken BIOSC 117, 120, 139, or 140

The broad concepts and principles of biology as applied to humans. Topics include human evolution, ecology, human genetics, DNA structure and function, disease factors, nutrition and metabolism, growth and development and survey of body systems. CSU, UC (credit limits may apply to UC - see counselor)

BIOSC-117 Human Biology with Laboratory  
4 units SC  
• 72 hours lecture/36 hours laboratory per term  
• Recommended: Eligibility for ENGL 122 or equivalent  
• Note: Not open to students who have taken BIOSC 116, 120, 139, or 140

The basic principles of biology will be covered, especially as they pertain to humans. Topics include cell structure, function and reproduction, human heredity, structure and function of a variety of human organ systems, ecology and evolution. A laboratory component is included that introduces the scientific method and experimentation, including data gathering and analysis with a variety of scientific equipment. CSU, UC (credit limits may apply to UC - see counselor)

BIOSC-119 Fundamentals of Microbiology  
4 units SC  
• 72 hours lecture/36 hours laboratory per term  
• Recommended: High school or college biology or chemistry; ENGL 122; and MATH 120 or equivalent

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)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title and Description</th>
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<tbody>
<tr>
<td>BIOSC-120</td>
<td>Introduction to Human Anatomy and Physiology</td>
</tr>
<tr>
<td>BIOSC-131</td>
<td>Principles of Organismal Biology, Evolution and Ecology</td>
</tr>
<tr>
<td>BIOSC-126</td>
<td>Nature Study and Conservation</td>
</tr>
<tr>
<td>BIOSC-130</td>
<td>Principles of Cellular and Molecular Biology</td>
</tr>
<tr>
<td>BIOSC-139</td>
<td>Human Anatomy</td>
</tr>
</tbody>
</table>

**BIOSC-120 Introduction to Human Anatomy and Physiology**

- 5 units SC
  - 90 hours lecture/72 hours laboratory per term
  - Recommended: High school biology or chemistry and ENGL 122 or equivalent

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-131 Principles of Organismal Biology, Evolution and Ecology**

- 5 units SC
  - 54 hours lecture/108 hours laboratory per term
  - Prerequisite: CHEM 120 or equivalent

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. CSU, UC

**BIOSC-126 Nature Study and Conservation**

- 4 units SC
  - 72 hours lecture/36 hours laboratory per term
  - Recommended: Eligibility for ENGL 122 or equivalent

This course surveys the natural history of ecological communities in Northern California. Conservation of our natural resources is stressed. Frequent guided field labs emphasize: identification methods for native plants and animals; the ecology of the local communities; evolutionary adaptations and the influences of geological and meteorological phenomena on that community. CSU, UC

**BIOSC-130 Principles of Cellular and Molecular Biology**

- 5 units SC
  - 90 hours lecture/72 hours laboratory per term
  - Prerequisite: CHEM 120 or equivalent
  - Recommended: Eligibility for ENGL 122 or equivalent

This course is intended for Biology majors or other students with an in-depth interest in the Biological Sciences. The course studies the universal biological processes of all organismal life with an emphasis upon the cellular level of organization. Topics include principles of biochemistry, cellular morphology and ultra structure, biochemical pathways and enzymes, cellular communication, classical and molecular genetics, gene control, embryology, immunology, and selected topics of animal physiology with emphasis on homeostatic control mechanisms. As part of the lab component students will design, execute and present in written and oral format an experimental research project. All aspects of the project will follow the format of a standard scientific investigation which includes the research, evaluation and appropriate incorporation of information already published in primary sources. CSU, UC

**BIOSC-139 Human Anatomy**

- 5 units SC
  - 90 hours lecture/72 hours laboratory per term
  - Recommended: BIOSC 102 and eligibility for ENGL 122 or equivalent

The physical structure of the human body as an integrated unit is studied stressing normal structure and the changes that occur with aging and disease. The course content is appropriate for majors in Physical and Health Education; Nursing; Physical, Occupational and Respiratory Therapy; Paramedical; Nurse Practitioner and Physician Assistant programs. Gross anatomy will be studied primarily through cadaver dissection in conjunction with preserved specimens, student self-reference, models and charts. Microscopic anatomy (histology) will be studied mainly through the use of microscope slides. CSU, UC (credit limits may apply to UC - see counselor)

**BIOSC-140 Human Physiology**

- 5 units SC
  - 90 hours lecture/72 hours laboratory per term
  - Prerequisite: BIOSC 139; CHEM 108 or one year high school chemistry or equivalent
  - Recommended: BIOSC 102; Eligibility for ENGL 122; MATH 120 or equivalent

The lectures are designed to help students understand the physiological mechanisms of the human body. Special emphasis will be given to regulatory mechanism on the cell and organ-system level employing chemical, mathematical and physical principles. The laboratory section will focus on the application, analysis and evaluation of major physiological principles using molecular technologies, bioelectronics, computer analysis, and/or live organisms. CSU, UC (credit limits may apply to UC - see counselor)
**BIOSC-146 Principles of Microbiology**

5 units SC
- 90 hours lecture/72 hours laboratory per term
- Prerequisite: CHEM 108 or equivalent
- Recommended: Eligibility for ENGL 122 and MATH 120 or equivalent

Topics include microscopy, culture of microbes and aseptic technique, control and identification of microbes, bacterial biochemistry, metabolism and physiology, cell structure and function, microbial genetics, recombinant DNA and biotechnology, viruses and their life cycles, immunology, epidemiology and study of select infectious diseases. 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

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
- 72 hours lecture/36 hours laboratory per term
- Recommended: Eligibility for ENGL 122 or equivalent

This course is an introduction to marine organisms, marine environments, and the ecological relationships that exist between them. Lecture topics will include (but are not limited to): the scientific method and its utilization in the marine sciences; physical, chemical and geological properties of the marine environment; marine organisms (including their classification, diversity and evolutionary adaptations); marine ecosystems; marine ecology; and marine resources and sustainable use of the sea. 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 may include but are not limited to evolution, ecology, biodiversity, human population dynamics, natural resource use, pollution, environmental degradation, climate change, marine and freshwater resources, and environmental policy. CSU, UC (credit limits may apply to UC - see counselor)

**BIOSC-171 Environmental Science with Laboratory**

4 units SC
- 72 hours lecture/36 hours laboratory per term
- Recommended: BIOSC 101 or BIOSC 102 or equivalent; eligibility for ENGL 122 or equivalent
- Note: Class trips may be organized to local sites related to course topics

An introductory course designed to expose students to environmental science with a laboratory. The lecture component will examine human interactions with the environment and their consequences for living and nonliving systems. Topics may include but are not limited to evolution, ecology, biodiversity, human population dynamics, natural resource use, pollution, environmental degradation, climate change, marine and freshwater resources, and environmental policy. The laboratory component will be in conjunction with the lecture. It will introduce the scientific method, including experimental design, sampling methods, data gathering and analysis. Laboratory and field techniques will be used to study concepts such as natural selection, climate change, biodiversity, and air and water pollution and its effects on organisms. Some labs may involve field trips to different ecosystems where various field collection techniques will be used to study ecological concepts. Emphasis will be placed on proper data collection and analysis techniques as well as representing those data in graphical form. CSU, UC (credit limits may apply to UC - see counselor)

**BIOSC-205 Introduction to Plant Biology**

4 units SC
- 72 hours lecture/36 hours laboratory per term
- Recommended: Eligibility for ENGL 122 or equivalent

An introduction to the science of biology by studying fundamental biological concepts with emphasis on plants. Topics studied include cell structure and function, metabolism, genetics, evolution, plant physiology, plant reproduction, plant diversity, and ecology. Economic uses of plants and plant biotechnology are also studied. CSU, UC

**BIOSC-299 Student Instructional Assistant**

.5-3 units SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU
BROADCAST COMMUNICATION ARTS – BCA

Applied and Fine Arts Division
Michael Almaguer, Dean
Humanities Building, 112 and 113
925-685-1230 ext. 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.

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

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 higher. Required courses can only be completed by attending a combination of day and evening classes. Some courses may satisfy both major and other graduation requirements; 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.

major requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTDM 110</td>
<td>Digital Imaging Process and Technique I</td>
<td>1.5</td>
</tr>
<tr>
<td>BCA 120</td>
<td>Introduction to Television Production Techniques</td>
<td>3</td>
</tr>
<tr>
<td>BCA 125</td>
<td>Introduction to Digital Film Style Production</td>
<td>3</td>
</tr>
<tr>
<td>BCA 130</td>
<td>Intermediate TV Studio Production</td>
<td>3</td>
</tr>
<tr>
<td>BCA 140</td>
<td>History of Broadcasting</td>
<td>3</td>
</tr>
<tr>
<td>BCA 165</td>
<td>Digital Editing</td>
<td>3</td>
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</table>

plus at least 3 units from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCA 290</td>
<td>Beginning Writing for Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>JRNL 110</td>
<td>Mass Media of Communication</td>
<td>3</td>
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</table>

plus at least 3 units from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCA 110</td>
<td>Introduction to Radio Production</td>
<td>3</td>
</tr>
<tr>
<td>BCA 126</td>
<td>Intermediate Digital Field Production</td>
<td>3</td>
</tr>
<tr>
<td>BCA 132</td>
<td>Advanced TV Studio Production</td>
<td>3</td>
</tr>
<tr>
<td>BCA 150</td>
<td>Music Video Production</td>
<td>3</td>
</tr>
<tr>
<td>BCA 166</td>
<td>Intermediate Digital Editing</td>
<td>3</td>
</tr>
<tr>
<td>BCA 190</td>
<td>Topics in Broadcast Communication Arts</td>
<td>3</td>
</tr>
<tr>
<td>FILM 293</td>
<td>Fundamentals of Film Making - Intermediate</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 Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTDM 195</td>
<td>Applied Production for Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>COOP 170</td>
<td>Occupational Work Experience</td>
<td>1-4</td>
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</table>

plus at least 6 units from:

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<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ARTDM 111</td>
<td>Digital Imaging Process and Technique II</td>
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<td>ARTDM 115</td>
<td>Digital Imaging Process and Technique III</td>
<td>3</td>
</tr>
<tr>
<td>ARTDM 149</td>
<td>Introduction to Digital Video</td>
<td>1.5</td>
</tr>
<tr>
<td>ARTDM 170</td>
<td>Multimedia for Web Delivery</td>
<td>3</td>
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<tr>
<td>BCA 126</td>
<td>Intermediate Digital Field Production</td>
<td>3</td>
</tr>
<tr>
<td>BCA 132</td>
<td>Advanced TV Studio Production</td>
<td>3</td>
</tr>
<tr>
<td>BCA 166</td>
<td>Intermediate Digital Editing</td>
<td>3</td>
</tr>
<tr>
<td>BCA 190</td>
<td>Topics in Broadcast Communication Arts</td>
<td>3</td>
</tr>
<tr>
<td>BCA 260</td>
<td>American Ethnic Images in Television</td>
<td>3</td>
</tr>
<tr>
<td>BCA 298</td>
<td>Independent Study</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 and Venture Management</td>
<td>3</td>
</tr>
<tr>
<td>BUSMK 255</td>
<td>Advertising</td>
<td>3</td>
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<td>DRAMA 122</td>
<td>Basic Principles of Acting</td>
<td>3</td>
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<tr>
<td>DRAMA 123</td>
<td>Intermediate Principles of Acting</td>
<td>3</td>
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<tr>
<td>DRAMA 124</td>
<td>Advanced Principles of Acting</td>
<td>6</td>
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<tr>
<td>DRAMA 126</td>
<td>Acting on Camera</td>
<td>3</td>
</tr>
<tr>
<td>ELTRN 116</td>
<td>Introduction to Electronics</td>
<td>2-4</td>
</tr>
<tr>
<td>ENGL 151</td>
<td>The Short Story</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 152</td>
<td>The Short Film</td>
<td>3</td>
</tr>
<tr>
<td>FILM 180</td>
<td>Comparative Film Studies</td>
<td>3</td>
</tr>
<tr>
<td>FILM 280</td>
<td>Introduction to Film: American Cinema - 1900 to 1950</td>
<td>3</td>
</tr>
<tr>
<td>FILM 281</td>
<td>Introduction to Film: World Cinema - 1900 to 1960</td>
<td>3</td>
</tr>
</tbody>
</table>

DIABLO VALLEY COLLEGE  CATALOG 2010-2011  PROGRAMS AND COURSES 127
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 higher. Required courses can only be completed by attending a combination of day and evening classes.

**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.
ENGL 151 The Short Story ........................................ 3
ENGL 152 The Short Film .......................................... 3
FILM 180 Comparative Film Studies ............................... 3
FILM 280 Introduction to Film: American Cinema - 1900 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 minimum required units** 31.5

For recommended sequence of study, see major requirements for A.A. degree in Broadcast Communication Arts above.

### 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 higher. Required courses can only be completed by attending a combination of day and evening classes.

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCA 125 Introduction to Digital Film Style Production</td>
<td>3</td>
</tr>
<tr>
<td>BCA 126 Intermediate Digital Field Production</td>
<td>3</td>
</tr>
<tr>
<td>BCA 165 Digital Editing</td>
<td>3</td>
</tr>
<tr>
<td>BCA 140 History of Broadcasting</td>
<td>3</td>
</tr>
</tbody>
</table>

**plus a minimum of 3 units from:**

| ARTDM 110 Digital Imaging Process and Technique I      | 1.5   |
| ARTDM 111 Digital Imaging Process and Technique II     | 1.5   |
| ARTDM 195 Applied Production for Digital Media         | 3     |
| BCA 140 Topics in Broadcast Communication Arts         | 0.3-4 |
| BCA 260 American Ethnic Images in Television           | 3     |
| BCA 298 Independent Study                              | 0.5-3 |
| COOP 170 Occupational Work Experience Education        | 1-4   |

**total minimum required units** 15

### 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 higher. Required courses can only be completed by attending a combination of day and evening classes.

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCA 140 History of Broadcasting</td>
<td>3</td>
</tr>
<tr>
<td>BCA 290 Beginning Writing for Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>FILM 150 Advanced Screen Writing</td>
<td>3</td>
</tr>
<tr>
<td>FILM 291 Film and TV Script Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

**plus a minimum of 3 units from:**

| BCA 190 Topics in Broadcast Communication Arts         | 0.3-4 |
| BCA 260 American Ethnic Images in Television           | 3     |
| BCA 298 Independent Study                              | 0.5-3 |
| COOP 170 Occupational Work Experience Education        | 1-4   |
| ENGL 151 The Short Story                               | 3     |
| JRNL 110 Mass Media of Communication                   | 3     |
| SPCH 148 Performance of Literature                     | 3     |

**total minimum required units** 15

### BCA-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 application, production procedures and student projects utilizing control consoles, microphones, tape and digital recording, and computerized audio editing. CSU

BCA-120 Introduction to TV Production Techniques
3 units SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
An introduction to multi-camera studio television production techniques through demonstration and practice in switching, camera operation, audio, video tape, floor managing, directing, teleprompting, and producing. CSU

BCA-125 Introduction to Digital Film Style Production
3 units SC
- 54 hours lecture per term
- 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 Editing
3 units SC
- 36 hours lecture/18 hours laboratory by arrangement per term
An introduction to the techniques, concepts and aesthetics of digital non-linear, computerized editing for film, television and digital media. The student will become familiar with various professional software programs and develop an understanding of organization, timelines and story as well as editing for visual and audio effect. 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 and how to light typical situations, to solve common lighting problems, to use light meters and to make aesthetic choices part of the storytelling process. CSU

BCA-190  Topics in Broadcast Communication Arts
3 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

BCA-299  Student Instructional Assistant
.5-3 units SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.
Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

BUSINESS – BUS

Business Division
Ellen Kruse, Interim Dean
Business and Foreign Language Building 204
925-685-1230 ext. 2199

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

Associate in arts degree
Business - transfer

Associate in science degree
Business
- Specializations:
  Advanced general business
  Business marketing
  Management and leadership studies
  Real estate
  Small business management/entrepreneurship
  Wealth management

Certificate of achievement
Advanced general business
Business - core transfer
General business
Wealth management

Certificate of accomplishment
Business essentials
Associate in arts degree - 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 higher and maintain an overall GPA of 2.5 or higher in the coursework required for the major; complete all graduation requirements; and complete at least 25% of all major coursework at Diablo Valley College. Some courses may satisfy both major and other graduation requirements; however, the units are only counted once.

major requirements

<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>BUSAC 186 Principles of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>BUSAC 187* Principles of Accounting II</td>
<td>4</td>
</tr>
<tr>
<td>ECON 220* Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 221* Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 182* Calculus for Management, Life Science and Social Science I</td>
<td>3</td>
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</table>

plus a minimum of 3 units from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 240* Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 142* Elementary Statistics with Probability</td>
<td>4</td>
</tr>
</tbody>
</table>

Choose one of the following six specialization areas:

advanced general business

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 109 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 250 Business Communications I</td>
<td>3</td>
</tr>
<tr>
<td>BUS 294 Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUSMG 120 Introduction to Management Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

plus a minimum of 3 units from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any BUS course not listed in the core requirements</td>
<td>3</td>
</tr>
<tr>
<td>Any BUSAC course not listed in the core requirements</td>
<td>3</td>
</tr>
<tr>
<td>Any BUSMG course not listed in the core requirements</td>
<td>3</td>
</tr>
<tr>
<td>Any BUSMK course not listed in the core requirements</td>
<td>3</td>
</tr>
<tr>
<td>Any RE course not listed in the core requirements</td>
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</tbody>
</table>

business marketing

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 240 Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>BUS MK 256 Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

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

Associate in science - Business
This curriculum is designed to provide an opportunity for business students to achieve an associate in science degree in general business after completing a series of foundation and more advanced courses that focus on a specific area of business, through completing coursework in an area of specialization such as general business, management, marketing, wealth management, small business/entrepreneurship, or real estate. Completion of this curriculum will demonstrate commitment to the field and provide comprehensive preparation for employment in business-related occupations.

This degree is not intended for transfer students. DVC business students who intend to transfer must consult with a program advisor or counselor to ensure that the requirements for transfer to four-year institutions of their choice are met. Students who intend to transfer are also advised to select either General Education Option 2 (IGETC) or Option 3 (CSU Breadth). General Education Option 1 (DVC General Education) is appropriate for students who do not intend to transfer.

To earn an associate degree with a major in Business with an area of specialization, students must complete each course used to meet a major requirement with a “C” grade or higher, maintain an overall GPA of 2.5 or higher in the coursework required for the major, and complete all graduation requirements as listed in the catalog. Students must complete at least 25% of all business-related course work at Diablo Valley College. Some courses may satisfy both major and other graduation requirements; however, the units are only counted once.

Students are limited to one associate in science degree regardless of the number of specializations completed. Multiple certificates may be awarded.

major requirements

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
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advanced general business

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<table>
<thead>
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<tbody>
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business marketing

<table>
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<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>BUS 240 Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>BUS MK 256 Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>
Certificate of achievement - Advanced general business

This curriculum is designed to expand general business knowledge and add depth and breadth in the areas of management and supervision, global business, and statistical arguments and solutions. The program provides development of general principles and skills applicable to all businesses and industries.

To earn the certificate of achievement in advanced general business, students must complete each course with a “C” grade or higher and maintain an overall GPA of 2.5 or higher in the coursework required for the certificate. All coursework required for the certificate must be completed within seven (7) years of the certificate date.

(required courses)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 109 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 209 International Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 240 Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>BUS 250 Business Communications I</td>
<td>3</td>
</tr>
<tr>
<td>BUS 294 Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUSMG 120 Introduction to Management Studies</td>
<td>3</td>
</tr>
<tr>
<td>BUSMG 121 Practices and Concepts of Supervision</td>
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<td>3</td>
</tr>
<tr>
<td>Any RE course not listed in the core requirements</td>
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</tr>
</tbody>
</table>

(total minimum required units) 24

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, if 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 higher; maintain an overall GPA of 2.5 or higher in the coursework required for the certificate; and complete at least 25% of all coursework at Diablo Valley College.

(required courses)

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
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<table>
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<td>3</td>
</tr>
<tr>
<td>Any RE course not listed in the core requirements</td>
<td>3</td>
</tr>
</tbody>
</table>

(total minimum required units) 24
## Business

**Certificate of achievement - General business**

This curriculum is designed to provide core business knowledge for obtaining entry-level employment in jobs requiring some general business skills. Course content emphasizes a survey of various business disciplines including marketing, finance and investments, small business/entrepreneurship and real estate. Additionally, the curriculum develops skills in business communications, provides a background in general business law, and introduces management studies.

To earn the certificate of achievement in general business, students must complete each course with a “C” grade or higher and maintain an overall GPA of 2.5 or higher in the coursework required for the certificate. All coursework required for the certificate must be completed within seven (7) years of the certificate date.

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAC 186 Principles of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>BUSAC 187* Principles of Accounting II</td>
<td>4</td>
</tr>
<tr>
<td>ECON 220* Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 221* Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 182* Calculus for Management, Life Science and Social Science I</td>
<td>3</td>
</tr>
</tbody>
</table>

plus a minimum of 3 units from:

| BUS 240* Business Statistics                         | 3     |
| MATH 142* Elementary Statistics with Probability     | 4     |
| BUS 109 Introduction to Business                     | 3     |
| BUS 294 Business Law                                  | 3     |

**Certificate of accomplishment - Business essentials**

This certificate of accomplishment provides a core curriculum of business skills necessary for obtaining entry-level employment in a business or office environment. This certificate or its equivalent is required in order to complete the requirements for a certificate of achievement in the business or accounting areas.

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

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 161 Personal Money Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 261 Investments</td>
<td>3</td>
</tr>
<tr>
<td>BUS 291 Wills, Trusts and Estate Planning</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSAC 285 Federal Income Taxes – Individuals</td>
<td>3</td>
</tr>
<tr>
<td>RE 164 Real Estate Finance</td>
<td>3</td>
</tr>
</tbody>
</table>

**Certificate of achievement - Wealth management**

This curriculum is designed to provide targeted financial knowledge concerning money management, insurance, wealth accumulation, income taxes, investments, and estate planning for the individual. This is a multi-disciplinary program involving accounting, finance, and law.

To earn the certificate of achievement in wealth management, students must complete each course with a “C” grade or higher and maintain an overall GPA of 2.5 or higher in the coursework required for the certificate. All coursework required for the certificate must be completed within seven (7) years of the certificate date.

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 250 Business Communications I</td>
<td>3</td>
</tr>
<tr>
<td>BUS 294 Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUSMG 120 Introduction to Management Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

<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>LS 121 Information Competency and Research Skills</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 109 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 294 Business Law</td>
<td>3</td>
</tr>
</tbody>
</table>

**Certificate requirements may be completed by attending a combination of day and evening, hybrid and/or online classes.**

**BUS-101 Business English**

3 units SC

- **Recommended:** Eligibility for ENGL 122 or equivalent

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

- **Recommended:** Eligibility for ENGL 122 or equivalent

An examination of key concepts and applications of mathematics to solve business problems. Topics include calculating percentages and commissions, trade and cash discounts, markups and markdowns, banking, payroll, taxes, insurance, simple and compound interest, inventory and turnover, depreciation, analysis of financial statements, international business mathematics applications, stocks and bonds, and annuities. CSU
BUS-105  Business Etiquette  
1 unit  SC  
• 18 hours lecture per term  
• Recommended: ENGL 118 or equivalent  
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-109  Introduction to Business  
3 units  SC  
• 54 hours lecture per term  
• Recommended: Eligibility for ENGL 122 or equivalent  
This survey course provides an introduction to the study of the modern business enterprise. Students will examine the role of business in a market economy, survey current business trends and evaluate the global, financial, and social environment in which businesses exist and operate. Moreover, the course will describe the evolution, formation and management of American and international businesses, and provide a basic understanding of various functional areas of business, including economics, marketing, finance, management, human resources, international operations, and business decision making using information technology. CSU, UC

BUS-115  Business E-Mail and Web-Based Communication  
1 unit  SC  
• 18 hours lecture per term  
• Recommended: Eligibility for ENGL 122 or equivalent  
A course in how to prepare professional, high-quality e-mail messages and web-based communications for both internal and external audiences. Students will learn how these tools are used in the workplace and how to use them professionally and effectively. CSU

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

BUS-161  Personal Money Management  
3 units  SC  
• 54 hours lecture per term  
• Recommended: BUS 109 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 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: poisson, 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. Using spreadsheet-based software (such as MS Excel) to compute statistics in large-data applications. 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 and proposals; to use 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  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 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 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 or equivalent
A comprehensive course that: 1) provides an overview of financial markets and financial assets such as stocks, bonds and mutual funds; 2) develops a basic understanding of how to value different financial assets and select investment opportunities; and 3) improves research and analytical skills for better investment 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. CSU, UC

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  Student Instructional Assistant
.5-3 units  SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.
Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU
BUSINESS ACCOUNTING – BUSAC

Business Division
Ellen Kruse, Interim Dean
Business and Foreign Language Building 204
925-685-1230 ext. 2199

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.

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

Associate in science degree
Accounting
Certificate of achievement
Advanced accounting
Bookkeeping
General accounting

Associate in science degree - Accounting
This curriculum is designed to provide an opportunity for accounting students to achieve an associate in science degree in accounting after completing a comprehensive series of courses in the area of accounting. Completion of this curriculum satisfies the accounting unit requirement to take the California CPA exam (For additional requirements please go to www.dca.ca.gov/cba), demonstrates commitment to the field of accounting, and provides comprehensive preparation for employment in accounting-related occupations. This degree is not intended for transfer students. DVC accounting students who intend to transfer must consult with a program advisor or counselor to ensure that the requirements for transfer to four-year institutions of their choice are met. Students who intend to transfer are also advised to select either General Education Option 2 (IGETC) or Option 3 (CSU Breadth). General Education Option 1 (DVC General Education) is appropriate for students who do not intend to transfer.

To earn an associate degree with a major in accounting students must complete each course used to meet a major requirement with a “C” grade or higher, maintain an overall GPA of 2.5 or higher in the coursework required for the major and complete all graduation requirements as listed in the catalog. Students must complete at least 25% of all business-related course work at Diablo Valley College. Some courses may satisfy both major and other graduation requirements; however, the units are only counted once.

major requirements units
BUSAC 186 Principles of Accounting I .................. 4
BUSAC 187 Principles of Accounting II .................. 4
BUSIM 145 Business Spreadsheet Applications ........ 2

plus at least 3 units from:
BUS 240 Business Statistics ........................................ 3
BUS 250 Business Communications I ..................... 3
BUSAC 182 Computer Income Tax Return Preparation – Individuals 1.5
BUSAC 185 QuickBooks Accounting for Business I .......... 1.5
BUSAC 188 QuickBooks Accounting for Business II .......... 1.5
BUSAC 190 Payroll Accounting .................................. 1.5
COOP 170 Occupational Work Experience Education .. 1–4

plus at least 12 units from:
BUS 294 Business Law .............................................. 3
BUSAC 282 Intermediate Accounting ......................... 3
BUSAC 283 Auditing ................................................. 3
BUSAC 284 Cost Accounting ....................................... 3
BUSAC 285 Federal Income Taxes – Individuals ............ 3
BUSAC 286 Governmental and Not-for-Profit Accounting .. 3
BUSAC 290 Corporate Financial Reporting and Financial Statement Analysis .................................. 3

plus at least 3 units from:
BUS 209 International Business ......................... 3
BUS 240 Business Statistics ........................................ 3
BUS 250 Business Communications I ..................... 3
BUSMG 191 Small Business Management .................. 3
BUSMG 192 Entrepreneurship and Venture Management .. 3

total minimum required units 28

Certificate of achievement - Advanced accounting
The certificate of achievement in advanced accounting builds on the curriculum in the general accounting certificate program and is designed to add technical depth and analytical skill-set development in the areas of financial accounting auditing, cost accounting, individual income taxation, governmental and not-for-profit accounting and corporate financial reporting for those students with a solid foundation in general accounting. Subjects in this program prepare students for higher level accounting positions and for taking certification examinations in the field of accounting such as enrolled agent, certified fraud examiner, certified internal auditor, certified public accountant or certified management accountant.
Students are required to obtain a grade of “C” or higher in all required courses. Certificate courses are offered in a combination of day, evening, weekend and online courses. At least 25 percent of the units must be completed at DVC. Requests for course substitution are made to the business administration department chairperson.

**Required courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>BUSIM 145</td>
<td>Business Spreadsheet Applications</td>
<td>2</td>
</tr>
</tbody>
</table>

**Plus at least 3 units from:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 240</td>
<td>Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>BUS 250</td>
<td>Business Communications I</td>
<td>3</td>
</tr>
<tr>
<td>BUSAC 182</td>
<td>Computer Income Tax Return Preparation - Individuals</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSAC 185</td>
<td>QuickBooks Accounting for Business I</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSAC 188</td>
<td>QuickBooks Accounting for Business II</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSAC 190</td>
<td>Payroll Accounting</td>
<td>1.5</td>
</tr>
<tr>
<td>COOP 170</td>
<td>Occupational Work Experience Education</td>
<td>1-4</td>
</tr>
</tbody>
</table>

**Plus at least 12 units from:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>BUS 294</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUSAC 282</td>
<td>Intermediate Accounting</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>
<tr>
<td>BUSAC 290</td>
<td>Corporate Financial Reporting and Financial Statement Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total minimum required units**: 28

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**Certificate of achievement - Bookkeeping**

The certificate program in bookkeeping is designed to provide basic business knowledge for obtaining entry-level employment in jobs requiring bookkeeping and accounting skills. Course content emphasizes small business applications for both a service and merchandising business and includes a solid foundation in bookkeeping principles and the classifying and double-entry recording of financial transactions and preparation of the income statement and balance sheet.

Students are required to obtain a grade of “C” or higher in all required courses. Certificate courses are offered in a combination of day, evening, weekend and online courses. At least 25 percent of the units must be completed at DVC. Requests for course substitution are made to the business administration department chairperson.

**Required courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAC 186</td>
<td>Principles of Accounting I</td>
</tr>
<tr>
<td>BUSAC 187</td>
<td>Principles of Accounting II</td>
</tr>
<tr>
<td>BUSIM 145</td>
<td>Business Spreadsheet Applications</td>
</tr>
</tbody>
</table>

**Plus 8-9 units from:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BUS 250</td>
<td>Business Communications I</td>
<td>3</td>
</tr>
<tr>
<td>BUSAC 182</td>
<td>Computer Income Tax Return Preparation - Individuals</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSAC 185</td>
<td>QuickBooks Accounting for Business I</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSAC 188</td>
<td>QuickBooks Accounting for Business II</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSAC 190</td>
<td>Payroll Accounting</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSIM 145</td>
<td>Business Spreadsheet Applications</td>
<td>2</td>
</tr>
<tr>
<td>COOP 170</td>
<td>Occupational Work Experience Education</td>
<td>1-4</td>
</tr>
</tbody>
</table>

**Total minimum required units**: 13

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**Certificate of achievement - General accounting**

This entry-level accounting certificate provides students with basic accounting and computer accounting coursework. Completion of the certificate will enable students to apply for entry-level positions in accounting.

Students are required to obtain a grade of “C” or higher in all required courses. Certificate courses are offered in a combination of day, evening, weekend and online courses. At least 25 percent of the units must be completed at DVC. Requests for course substitution are made to the business administration department chairperson.

**Required courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAC 186</td>
<td>Principles of Accounting I</td>
</tr>
<tr>
<td>BUSAC 187</td>
<td>Principles of Accounting II</td>
</tr>
<tr>
<td>BUSIM 145</td>
<td>Business Spreadsheet Applications</td>
</tr>
</tbody>
</table>

**Plus at least 3 units from:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAC 181</td>
<td>Applied Accounting</td>
</tr>
<tr>
<td>BUSAC 186</td>
<td>Principles of Accounting I</td>
</tr>
<tr>
<td>BUSAC 250</td>
<td>Business Communications I</td>
</tr>
<tr>
<td>BUSAC 240</td>
<td>Business Statistics</td>
</tr>
<tr>
<td>BUSAC 282</td>
<td>Intermediate Accounting</td>
</tr>
<tr>
<td>BUSAC 283</td>
<td>Auditing</td>
</tr>
<tr>
<td>BUSAC 284</td>
<td>Cost Accounting</td>
</tr>
<tr>
<td>BUSAC 285</td>
<td>Federal Income Taxes - Individuals</td>
</tr>
<tr>
<td>BUSAC 286</td>
<td>Governmental and Not-for-Profit Accounting</td>
</tr>
<tr>
<td>BUSAC 290</td>
<td>Corporate Financial Reporting and Financial Statement Analysis</td>
</tr>
</tbody>
</table>

**Total minimum required units**: 28

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**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 classes. 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. Credit by examination option available.

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 computerized accounting software program. CSU

BUSAC-182  Computer Income Tax Return Preparation - Individuals  
1.5 units  SC  
- May be repeated once  
- 18 hours lecture/9 hours laboratory/18 hours laboratory by arrangement per term  
- Recommended: BUSAC 285 or equivalent; eligibility for ENGL 122 or equivalent  
- Note: Course may be repeated when software program or online filing system changes

This is a course that uses a popular tax software program or online filing system to prepare income tax returns for an individual. Topics will include the basic tax formula, filing status, exemptions, dependents and the procedures for creating a taxpayer file and processing income, deductions, credits, capital gains and losses, and business activities to produce a final tax return. CSU

BUSAC-185  QuickBooks Accounting for Business I  
1.5 units  SC  
- May be repeated once  
- 18 hours lecture/9 hours laboratory/18 hours laboratory by arrangement per term  
- Recommended: Completion of at least one half (1/2) of BUSAC 181 or 186 or equivalent; eligibility for ENGL 122 or equivalent

An introductory course to computer accounting for business. Applies basic accounting knowledge and theory in QuickBooks. Includes sales, invoicing and receivables, payables and purchases, general accounting, financial statements, and end-of-period procedures for a service business. This course builds upon knowledge of bookkeeping principles. 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. CSU, UC

BUSAC-187  Principles of Accounting II  
4 units  SC  
- 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. CSU, UC

BUSAC-188  QuickBooks 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: BUSAC 185 or equivalent; eligibility for ENGL 122 or equivalent  
- Note: Course may be repeated when software program changes

A second level course in computer accounting for business using a recognized software program. Focus will be on developing skills for creating a set of records and applications for a merchandising business including sales and receivables, payables and purchases, and end of period procedures. Topics will also include payroll and payroll tax reporting and related preparation of employee earnings reports. CSU

BUSAC-190  Payroll Accounting  
1.5 units  SC  
- 27 hours lecture per term  
- Recommended: Eligibility for ENGL 122 or equivalent

This course will cover one of the most important accounting functions: payroll. Students will learn how to calculate wages, determine required employer and employee tax deductions, process payroll, and file required reports. The course will also cover employment legislation and tax laws that affect payroll. CSU
BUSAC-282 Intermediate Accounting
3 units SC
- 54 hours lecture/18 hours laboratory by arrangement per term
- Prerequisite: BUSAC 186 or equivalent
- Recommended: BUSAC 187 or equivalent

An advanced level financial accounting course that reviews and builds on the foundation material presented in Principles of Accounting I. Emphasizes financial accounting concepts and reporting issues in association with financial statement preparation and interpretation. CSU

BUSAC-283 Auditing
3 units SC
- 54 hours lecture/18 hours laboratory by arrangement per term
- Prerequisite: BUSAC 186 or equivalent
- Recommended: BUSAC 187 or equivalent

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-289 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

BUSAC-299 Student Instructional Assistant
.5-3 units SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU
**BUSINESS INFORMATION MANAGEMENT – BUSIM**

Business Division
Ellen Kruse, Interim Dean
Business and Foreign Language Building 204
925-685-1230 ext. 2199

**Possible career opportunities**
The office assistant curriculum prepares students for employment as an office assistant, office supervisor, medical or legal secretary, event coordinator, word processor, desktop publishing specialist, account assistant, or support team coordinator.

**Program level student learning outcomes**
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: [www.dvc.edu/slo](http://www.dvc.edu/slo) for the most current information.

**Certificate of achievement**
Office professional

**Certificate of accomplishment**
Office professional essentials

**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 higher. 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.

**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  Topics in Business Information Management  
.3-4 unit  SC  
• May be repeated three times  
• Non degree applicable  
• Variable hours  
• Recommended: Previous Windows experience  

A supplemental course in business information management to provide a study of current concepts and problems in information management. Specific topics will be announced in the schedule of classes.

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 classes 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: Eligibility for ENGL 122 or equivalent  
• Note: See schedule of classes for software used  

A business applications course, which uses a foundation of basic spreadsheet skills to emphasize the solving of business problems using a commercial spreadsheet program such as Excel. 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 skills 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 and communication. Special emphasis will be placed on professionalism, ethics, communication, and career management. CSU
BUSINESS MANAGEMENT – BUSMG

Business Division
Ellen Kruse, Interim Dean
Business and Foreign Language Building 204
925-685-1230 ext. 2199

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.

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

Certificates of achievement
Management studies
Small business management

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 higher. Required courses are available in the evening and during the day.

required courses
BUSDG-120 Introduction to Management Studies........ 3
BUSDG-121 Practices and Concepts of Supervision..... 3
BUSDG-131 Gender Issues in Management............... 3
BUSDG-132 Human Resource Management............. 3
BUSDG-226 Group Behavior and Leadership.......... 3

total minimum required units 15

*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 higher. Certificate requirements can be completed by attending in the day, the evening, or both.

required courses
BUSDG-120 Introduction to Management Studies........ 3
BUSDG-121 Practices and Concepts of Supervision..... 3
BUSDG-191 Small Business Management............... 3
BUSDG-192 Entrepreneurship/Venture Management.... 3
BUSDG-226 Group Behavior and Leadership.......... 3
BUSDG-158 Professional Selling......................... 3
BUSDG-255 Advertising................................. 3

plus at least 3 units from:
BUSAC-181 Applied Accounting........................ 3
BUSAC-186 Principles of Accounting I................ 4

total minimum required units 27

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

BUSDG-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, team work, 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 human resource management in organizations, including human resource planning; employment legislation; recruitment and selection; training and development; compensation and benefits; performance appraisal and career management; managing labor relations; safety, health, and well-being; and motivation and enhancing performance. The course will explore topics including values, ethical issues, leadership and communication, 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-191 Small Business Management
3 units SC
• 54 hours lecture per term
• Recommended: BUS 103, 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 franchisee, 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-226 Group Behavior and Leadership
3 units LR
• 54 hours lecture per term
• Recommended: BUS 109 or equivalent; eligibility for ENGL 122 or equivalent
This course will provide theoretical foundations and practical experiences with group behavior and leadership, resulting in increased awareness of the self in groups. The course includes the examination of workforce diversity, motivation, decision-making, and organizational politics. CSU

BUSINESS MARKETING – BUSMK

Business Division
Ellen Kruse, Interim Dean
Business and Foreign Language Building 204
925-685-1230 ext. 2199

Possible career opportunities
Students can build a solid foundation in all phases of retailing, merchandising, and management, and are then prepared to work as a salesperson, store manager, merchandiser, account executive, buyer, market researcher, consultant, district manager, or store owner/operator. Some career options may require more than two years of college study.
Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

Certificate of achievement
Business marketing

Certificate of achievement - Business marketing
This curriculum is designed to develop knowledge of sales, advertising, and marketing principles and procedures. Statistical analysis is incorporated into the program as a foundation for working in industry with target markets and data selection.

To earn the certificate of achievement in business marketing, students must complete each course with a “C” grade or higher and maintain an overall GPA of 2.5 or higher in the coursework required for the certificate. All coursework required for the certificate must be completed within seven (7) years of the certificate date.

required courses
BUS 240 Statistics......................................................... 3
BUSMK 256 Marketing.................................................... 3

plus a minimum of 6 units from:
BUS 209 International Business................................. 3
BUSMK 158 Professional Selling.................................. 3
BUSMK 255 Advertising.............................................. 3
Any RE course..................................................................... 3

total minimum required units 12

BUSMK-158 Professional Selling
3 units SC
• 54 hours lecture per term
• Recommended: BUS 109 or equivalent; eligibility for ENGL 122 or equivalent

Theory and practice of personal selling with a focus on relationship marketing and a concentration on the selling process. Emphasis on sales strategies, techniques and settings. Skills development in product knowledge, customer analysis, prospecting, presenting, and closing the sale. Also addresses team sales presentations. CSU

BUSMK-255 Advertising
3 units SC
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent

A study of the historical, social, ethical, economic, and regulatory aspects of advertising. The subject evaluates advertising, media, and creative strategies for traditional and electronic markets. Topics include effects of consumer behavior patterns, the client-agency relationship, and the development and evaluation of advertising campaigns. CSU

BUSMK-256 Marketing
3 units SC
• 54 hours lecture per term
• Recommended: BUS 109 or equivalent; eligibility for ENGL 122 or equivalent

Introduction to marketing functions involved in facilitating the exchange of goods and services. Focus on the analysis of markets: assessment of the marketing environment; formulation of marketing strategy; and development of the marketing mix variables of product, price, promotion, and distribution. Ethical issues considered. CSU

BUSMK-257 Applied Advertising and Promotion
3 units SC
• 54 hours lecture per term
• Recommended: BUSMK 255 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.

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

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 higher. All required courses are available in the evening.

| Program level student learning outcomes |  |
|-----------------------------------------|  |

| Certificate of achievement - Real estate |  |

| Certificate of achievement - Real estate |  |

<table>
<thead>
<tr>
<th>RE-150</th>
<th>Topics in Real Estate</th>
<th>.3-4 units SC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Variable hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A supplemental course in real estate to provide a study of current concepts and problems in real estate. Specific topics will be announced in the schedule of classes. CSU</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RE-160</th>
<th>Real Estate Principles</th>
<th>3 units SC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• 54 hours lecture per term</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RE-161</th>
<th>Legal Aspects of Real Estate</th>
<th>3 units SC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• 54 hours lecture per term</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Recommended: RE 160 or valid CA real estate license or equivalent; eligibility for ENGL 122 or equivalent</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Note: Applies toward the state educational requirements for brokers license examination</td>
<td></td>
</tr>
<tr>
<td></td>
<td>California law as it pertains to the practice of real estate. CSU</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RE-162</th>
<th>Real Estate Appraisal</th>
<th>3 units SC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• 54 hours lecture per term</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Recommended: RE 160 or valid California real estate license; eligibility for ENGL 122 or equivalent</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Note: Applies toward the state educational requirements for broker's license examination</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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</td>
<td></td>
</tr>
</tbody>
</table>
**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 or equivalent  
- Note: Applies toward the state educational requirements for brokers license examination  
A comprehensive presentation of techniques of prospecting, listing, selling, financing, purchase agreements, escrow, exchange, and property management. Subjects are covered primarily on a practical basis and include working knowledge of the practices necessary to be effective in the real estate industry. CSU

**RE-164 Real Estate Finance**  
3 units  SC  
- 54 hours lecture per term  
- Recommended: RE 160 or equivalent; eligibility for ENGL 122 or equivalent  
- Note: Applies toward the state educational requirements for the sales or broker's license  
A broad overview of real estate finance including conventional, FHA-VA and non-institutional loans as well as construction, investment, and creative financing. 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 equivalent; eligibility for ENGL 122 or equivalent  
This course focuses primarily on managing residential and apartment properties. It also contains information on commercial and business properties. Relevant topics include: acquisition, financing, maintenance, taxes, insurance, furnishings, and tenant relations. CSU

**RE-201 Advanced Real Estate Studies**  
.3-4 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

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**CAREER – CARER**

See also Counseling - COUNS

Counseling Division  
Terry Armstrong, Dean  
Counseling Center 211  
925-685-1230 ext. 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  
- 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.
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 employee 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 classes. 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 Science Building 263  
925-685-1230 ext. 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, nonprofit charities, or research foundations. Chemists work in manufacturing companies, cosmetic companies, environmental assessment firms, medical laboratories, petroleum companies and pharmaceutical companies. They also can become health administrators, and physicians (all specialties). Many careers require more than two years of college study.

CHEM-106 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 equivalent
• 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. 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 CHEM 120 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. 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 I
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 equivalent
• Recommended: Eligibility for ENGL 122 or equivalent
An introduction to the fundamentals of chemistry including the topics: atomic theory, chemical reactions, bonding, structure, stoichiometry, gases, solutions, redox, thermodynamics, equilibrium, and acid-base chemistry. 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 I. Subject matter includes: buffers, titration curves, solubility products, thermodynamics, electrochemistry, kinetics, molecular orbital theory, coordination complexes, nuclear chemistry, organic chemistry, spectroscopy, quantitative experiments, and qualitative analysis. CSU, UC

CHEM-150  Topics in Chemistry
.3-4 units  SC
• May be repeated three times
• 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 classes. CSU

CHEM-226  Organic Chemistry I
5 units  LR
• 90 hours lecture/72 hours laboratory per term
• Prerequisite: CHEM 121 or equivalent
This course is the first semester of a two semester sequence (CHEM 226-227) that covers structure and bonding, stereochemistry, conformational analysis, reaction mechanisms, and the nomenclature, physical properties, and reactions of various classes of organic compounds (alkanes, alkenes, alkynes, aromatics, allyl halides, alcohols, and ethers). Basic organic laboratory techniques are introduced and used in syntheses or other projects. Chemical safety, information retrieval and good lab practices are emphasized. A variety of laboratory instrumentation skills are developed including operation and analysis using GC, IR and UV-Visible spectroscopy. CSU, UC
CHEM-227 General Organic Chemistry II  
5 units LR  
- 90 hours lecture/72 hours laboratory per term  
- Prerequisite: CHEM 226 or equivalent

A continuation of CHEM 226, this second semester 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, proteins and nucleic acids) are also discussed. Laboratory work includes hands-on spectroscopic techniques (i.e. NMR, IR), qualitative organic analysis, more advance projects involving synthesis, and a library research project using university-level chemical literature resources. CSU, UC

CHEM-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 the faculty. CSU

CHEM-299 Student Instructional Assistant  
.5-3 units SC  
- May be repeated three times  
- Variable hours  
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. 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.

Program level student learning outcomes

A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

Certificate of achievement  
Mandarin Chinese

Certificate of achievement - Mandarin Chinese

This certificate of achievement was created to give students the opportunity to show potential employers in this country and in other countries that the student has completed a certain number of courses in Chinese and prepares students with an intermediate to advanced knowledge of Chinese and familiarizes them with the culture of China and other Chinese-speaking countries.

This certificate of achievement provides students, prospective employers and others with documented evidence of persistence and academic accomplishment in the language. The certificate requires completion of 15 to 20 units from the following list of courses. Each course used to meet a certificate requirement must be completed with a grade of “C” grade or higher.
complete a minimum of 15 units from the following list of courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>SC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHIN 120</td>
<td>First Term Mandarin Chinese</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHIN 121</td>
<td>Second Term Mandarin Chinese</td>
<td>5</td>
<td></td>
<td>• 90 hours lecture/18 hours laboratory by arrangement per term</td>
</tr>
<tr>
<td>CHIN 220</td>
<td>Third Term Mandarin Chinese</td>
<td></td>
<td></td>
<td>• Recommended: CHIN 120 or equivalent</td>
</tr>
<tr>
<td>CHIN 221</td>
<td>Fourth Term Mandarin Chinese</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Total minimum required units:** 15

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**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. 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

A continuation of CHIN 120 for verbal and written purposes. Use of original Chinese characters is introduced at the sentence and the paragraph level. Students will be familiarized with both simplified and original writing systems. Cultural topics may include education, family, and daily life. Writing skills will be emphasized. The proficiency level should develop to a basic survival level. 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 classes. 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 is a third term intermediate course, the continuation of CHIN 121, with a review of grammar. The student will develop fluency in understanding, speaking, reading and writing Chinese. The uses of the six basic functional components of the Chinese sentence are expanded and new vocabulary and idiomatic expressions are introduced. Selected readings about Chinese culture and literature will be explored. This course is taught entirely in original Chinese characters, and students may use either Chinese written system to develop their knowledge and ability. 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 to develop fluency in all aspects of the Chinese language with particular attention to literary forms as reflected in the contemporary Chinese world. This course reviews grammar and develops reading and writing skills in Chinese. Passages from Chinese literature and readings about Chinese culture will be studied. Computer skills in Chinese will be introduced. CSU, UC

**CHIN-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

**CHIN-299 Student Instructional Assistant**
.5-3 units SC
• May be repeated three times
• Variable hours
• Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

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**COLLOQUIA – COLQY**

Social Sciences Division
Lyn Krause, Dean
Faculty Office 134
925-685-1230 ext. 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. The purpose is to stimulate serious thought of a particular topic through
discussion and analysis. The schedule of classes and student transcript will indicate the general subject matter of each colloquium offered. CSU

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**COMPUTER INFORMATION SYSTEMS – CIS**

San Ramon Valley Center Division
Kathleen Costa, Dean
925-866-1822 ext. 5103

**Program level student learning outcomes**
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: [www.dvc.edu/slo](http://www.dvc.edu/slo) for the most current information.

**Associate in science degree**
Computer information systems

*Specializations:*
- Database management
- Project management
- Web technology
- Web graphics

**Certificates of achievement**
Computer information systems - Core
Computer information systems - Database management
Computer information systems - Project management
Computer information systems - Web graphics
Computer information systems - Web technology

**Certificates of accomplishment**
Computer information systems - Database management
Computer information systems - Project management
Computer information systems - Web graphics
Computer information systems - Web technology

**Associate in science degree - Computer information systems**
The computer information systems associate in science program prepares the student for jobs in business and government as information technologies and management workers. Principal areas of study are computer software applications, internet technologies, database systems, project management systems and basic network principles. These CIS courses prepare students for a career path in computer information systems and technologies. These courses teach terminology and provide hands-on laboratory experience with operating and network systems and stand alone and internet based applications.

In order to obtain an associate in science degree, students must complete the courses required for the core certificate of achievement and a minimum of one area of technical specialization, and complete all graduation requirements as listed in the Diablo Valley College catalog. To earn a degree, students must complete each course used to meet a major requirement with a “C” grade or higher and maintain an overall GPA of 2.5 or higher in the coursework required for the major. Other electives and course substitutions not listed below are possible with department chairperson approval.

Students are limited to one associate in science degree regardless of the number of specializations completed. Multiple certificates may be awarded.

**major requirements** | units
--- | ---

**core courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 115 Microsoft Word - Comprehensive</td>
<td>2</td>
</tr>
<tr>
<td>CIS 116 Microsoft Excel - Comprehensive</td>
<td>2</td>
</tr>
<tr>
<td>CIS 118 Microsoft PowerPoint - Comprehensive</td>
<td>2</td>
</tr>
<tr>
<td>plus a minimum of 2 units from:</td>
<td></td>
</tr>
<tr>
<td>CIS 100 Microsoft Windows - Comprehensive</td>
<td>2</td>
</tr>
<tr>
<td>CIS 101 Apple Mac Operating System</td>
<td>2</td>
</tr>
</tbody>
</table>

**project management - required courses**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>CIS 107 Web Database with Dreamweaver</td>
<td>2</td>
</tr>
<tr>
<td>CIS 117 Microsoft Access - Comprehensive</td>
<td>2</td>
</tr>
<tr>
<td>CIS 160 Introduction to MySQL</td>
<td>2</td>
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</tbody>
</table>

**database management - recommended elective**

<table>
<thead>
<tr>
<th>Course</th>
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</tr>
</thead>
<tbody>
<tr>
<td>CNT 135 SQL Programming</td>
<td>4</td>
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**project management - required courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>CIS 180 Introduction to Project Management/ CAPM Prep</td>
<td>3</td>
</tr>
<tr>
<td>CIS 181 Project Management Fundamentals/ PMI PMP Prep</td>
<td>3</td>
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</tbody>
</table>

**project management - recommended electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 185 Microsoft Project</td>
<td>2</td>
</tr>
<tr>
<td>CIS 186 Microsoft Visio</td>
<td>2</td>
</tr>
</tbody>
</table>
web technology - required courses
CIS 105 Introduction to Web Design .................................. 2
CIS 106 Adobe Dreamweaver - Comprehensive .................. 2
CIS 107 Web Database with Dreamweaver ......................... 2

web technology - recommended electives
CIS 117 Microsoft Access - Comprehensive ....................... 2
CIS 160 Introduction to MySQL ...................................... 2
COMSC 095 WWW Publishing with HTML ......................... 1

web graphics - required courses
CIS 130 Adobe Photoshop Elements .................................. 2
CIS 131 Adobe Flash - Comprehensive .............................. 2
CIS 132 Adobe Premiere Elements - Comprehensive ............ 2

web graphics - recommended electives
CIS 133 Using Camtasia .................................................. 1
CIS 134 Using Apple iLife ................................................ 2
CIS 135 Podcasting ......................................................... 1

Certificate of achievement - computer information systems - core
required courses units
CIS 115 Microsoft Word - Comprehensive ......................... 2
CIS 116 Microsoft Excel - Comprehensive .......................... 2
CIS 118 Microsoft PowerPoint - Comprehensive .................. 2

plus a minimum of 2 units from:
CIS 100 Microsoft Windows - Comprehensive .................... 2
CIS 101 Apple Mac Operating System ................................ 2

Certificate of achievement - Computer information systems - database management
required courses units
CIS 107 Web Database with Dreamweaver ......................... 2
CIS 115 Microsoft Word - Comprehensive ......................... 2
CIS 116 Microsoft Excel - Comprehensive .......................... 2
CIS 117 Microsoft Access - Comprehensive ....................... 2
CIS 118 Microsoft PowerPoint - Comprehensive .................. 2
CIS 160 Introduction to MySQL ...................................... 2

plus a minimum of 2 units from:
CIS 100 Microsoft Windows - Comprehensive .................... 2
CIS 101 Apple Mac Operating System ................................ 2

Certificate of achievement - Computer information systems - project management
required course units
CIS 115 Microsoft Word - Comprehensive ......................... 2
CIS 116 Microsoft Excel - Comprehensive .......................... 2
CIS 118 Microsoft PowerPoint - Comprehensive .................. 2
CIS 180 Introduction to Project Management/PMI PMP Prep .......... 3
CIS 181 Project Management Fundamentals/PMI PMP Prep .......... 3

plus a minimum of 2 units from:
CIS 100 Microsoft Windows - Comprehensive .................... 2
CIS 101 Apple Mac Operating System ................................ 2

Certificate of achievement - Computer information systems - web graphics
required courses units
CIS 117 Microsoft Access - Comprehensive ....................... 2
CIS 119 Microsoft Outlook - Comprehensive ...................... 2
COMSC 138 Using Visual Basic for Applications .................. 2

Certificate of achievement - Computer information systems - project management
required course units
CIS 115 Microsoft Word - Comprehensive ......................... 2
CIS 116 Microsoft Excel - Comprehensive .......................... 2
CIS 118 Microsoft PowerPoint - Comprehensive .................. 2
CIS 180 Introduction to Project Management/PMI PMP Prep .......... 3
CIS 181 Project Management Fundamentals/PMI PMP Prep .......... 3

plus a minimum of 2 units from:
CIS 100 Microsoft Windows - Comprehensive .................... 2
CIS 101 Apple Mac Operating System ................................ 2

web graphics - recommended electives
CIS 133 Using Camtasia .................................................. 1
CIS 134 Using Apple iLife ................................................ 2
CIS 135 Podcasting ......................................................... 1

total minimum required units 18

Computer information systems - database management
required courses units
CIS 107 Web Database with Dreamweaver ......................... 2
CIS 115 Microsoft Word - Comprehensive ......................... 2
CIS 116 Microsoft Excel - Comprehensive .......................... 2
CIS 117 Microsoft Access - Comprehensive ....................... 2
CIS 118 Microsoft PowerPoint - Comprehensive .................. 2
CIS 160 Introduction to MySQL ...................................... 2

plus a minimum of 2 units from:
CIS 100 Microsoft Windows - Comprehensive .................... 2
CIS 101 Apple Mac Operating System ................................ 2

Certificate of achievement - Computer information systems - web graphics
required courses units
CIS 117 Microsoft Access - Comprehensive ....................... 2
CIS 119 Microsoft Outlook - Comprehensive ...................... 2
COMSC 138 Using Visual Basic for Applications .................. 2

plus a minimum of 2 units from:
CIS 100 Microsoft Windows - Comprehensive .................... 2
CIS 101 Apple Mac Operating System ................................ 2

web graphics - recommended electives
CIS 133 Using Camtasia .................................................. 1
CIS 134 Using Apple iLife ................................................ 2
CIS 135 Podcasting ......................................................... 1

total minimum required units 18
### Certificate of achievement - Computer information systems - web technology

**Required courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 105</td>
<td>2</td>
</tr>
<tr>
<td>CIS 106</td>
<td>2</td>
</tr>
<tr>
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<td>CIS 116</td>
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**Units**

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**Total minimum required units:** 18

### Web Technology - Recommended electives

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### Certificate of accomplishment - Computer information systems - database management

**Required courses**

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**Total minimum required units** 6

**Database management - Recommended elective**

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### Certificate of accomplishment - Computer information systems - project management

**Required courses**

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<tbody>
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**Total minimum required units** 6

**Project management - Recommended electives**

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### Certificate of accomplishment - Computer information systems - web graphics

**Required courses**

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<th>Course</th>
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**Total minimum required units** 6

**Web graphics - Recommended electives**

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### Certificate of accomplishment - Computer information systems - web technology

**Required course**

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**Total minimum required units** 6

### Certificate of accomplishment - Computer information systems - database management

**Required courses**

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**Total minimum required units** 6

### Certificate of accomplishment - Computer information systems - project management

**Required courses**

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**Total minimum required units** 6

**Project management - Recommended electives**

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### Certificate of accomplishment - Computer information systems - database management

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### Certificate of accomplishment - Computer information systems - project management

**Required courses**

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**Total minimum required units** 6

**Project management - Recommended electives**

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### Certificate of accomplishment - Computer information systems - web graphics

**Required courses**

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**Total minimum required units** 6

**Web graphics - Recommended electives**

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### Certificate of accomplishment - Computer information systems - web technology

**Required course**

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**Total minimum required units** 6

### Certificate of accomplishment - Computer information systems - database management

**Required courses**

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**Total minimum required units** 6

### Certificate of accomplishment - Computer information systems - project management

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**Total minimum required units** 6

**Project management - Recommended electives**

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### Certificate of accomplishment - Computer information systems - web graphics

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**Total minimum required units** 6

**Web graphics - Recommended electives**

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### Certificate of accomplishment - Computer information systems - web technology

**Required course**

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**Total minimum required units** 6

## Course Descriptions

**CiS-050 Topics in Current Operating Systems**

- **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 computer operating systems. Specific topics will be announced in the schedule of classes.

**CiS-051 Topics in Word Processing 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 word processing applications. Specific topics will be announced in the schedule of classes.

**CiS-052 Topics in Spreadsheets and Financial 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 spreadsheets and financial applications.
applications. Specific topics will be announced in the schedule of classes.

**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 classes.

**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 classes.

**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 classes.

**CIS-099  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 classes.

**CIS-100  Microsoft Windows - Comprehensive**

- 2 units SC
- May be repeated once
- 36 hours lecture/18 hours laboratory per term
- Note: Credit by examination option available

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
- Note: Credit by examination option available

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

**CIS-105  Introduction to Web Design**

- 2 units SC
- May be repeated once
- 36 hours lecture/18 hours laboratory per term
- Recommended: CIS 100 or CIS 101 or equivalent
- Note: Credit by examination option available

This course introduces students to the web development cycle. This process is used to create, organize, and maintain web sites that are easy to use and understand. Emphasis is placed on navigation, organization, presentation, and maintenance of web sites. No previous web design experience is required. CSU

**CIS-106  Adobe Dreamweaver - Comprehensive**

- 2 units SC
- May be repeated once
- 36 hours lecture/18 hours laboratory per term
- Recommended: CIS 100 or CIS 101 or equivalent
- Note: Credit by examination option available

This course is for students who want to learn the comprehensive functions of Adobe Dreamweaver. This program, which is part of the Adobe Creative Suite, is a web authoring and web animation software that is used industry wide. This course is for students who want a deeper understanding of the program. No previous experience with this software is required. CSU

**CIS-107  Web Database with Dreamweaver**

- 2 units SC
- May be repeated once
- 36 hours lecture/18 hours laboratory per term
- Recommended: CIS 100 or CIS 101 or equivalent
- Note: Credit by examination option available

This course will enable students to use Dreamweaver to develop database-driven web pages. Students will learn basic database concept and use Dreamweaver’s server behaviors to connect to a database and display and manipulate database content over the web. CSU

**CIS-115  Microsoft Word - Comprehensive**

- 2 units SC
- May be repeated once
- 36 hours lecture/18 hours laboratory per term
- Recommended: CIS 100 or CIS 101 or equivalent
- Note: Credit by examination option available

This course is for students who want to learn the comprehensive functions of Microsoft Word, a word processing software.
cessing program which is part of the Microsoft Office Suite. This course prepares students for Microsoft certification testing but is also useful for students who want a deeper understanding of the program. No previous experience with this software is required. CSU

**CIS-116 Microsoft Excel - Comprehensive**  
2 units SC  
- May be repeated once  
- 36 hours lecture/18 hours laboratory per term  
- Recommended: CIS 100 or CIS 101 or equivalent  
- Note: Credit by examination option available  

This course is for students who want to learn the comprehensive functions of Microsoft Excel, a powerful spreadsheet program which is part of the Microsoft Office Suite. This course prepares students for Microsoft certification testing but is also useful for students who want a deeper understanding of the program. No previous experience with this software is required. CSU

**CIS-117 Microsoft Access - Comprehensive**  
2 units SC  
- May be repeated once  
- 36 hours lecture/18 hours laboratory per term  
- Recommended: CIS 100 or CIS 101 or equivalent  
- Note: Credit by examination option available  

This course is for students who want to learn the comprehensive functions of Microsoft Access, a powerful database program which is part of the Microsoft Office Suite. This course prepares students for Microsoft certification testing but is also useful for students who want a deeper understanding of the program. No previous experience with this software is required. CSU

**CIS-118 Microsoft PowerPoint - 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 is for students who want to learn the comprehensive functions of Microsoft PowerPoint, a powerful presentation program which is part of the Microsoft Office Suite. This course prepares students for Microsoft certification testing but is also useful for students who want a deeper understanding of the program. No previous experience with this software is required. CSU

**CIS-119 Microsoft Outlook - Comprehensive**  
2 units SC  
- May be repeated once  
- 36 hours lecture/18 hours laboratory per term  
- Recommended: CIS 100 or CIS 101 or equivalent  
- Note: Credit by examination option available  

This course is for students who want to learn the comprehensive functions of Microsoft Outlook, a powerful email and personal information manager program which is part of the Microsoft Office Suite. This course prepares students for Microsoft certification testing but is also useful for students who want a deeper understanding of the program. No previous experience with this software is required. CSU

**CIS-130 Adobe Photoshop Elements**  
2 units SC  
- May be repeated once  
- 36 hours lecture/18 hours laboratory per term  
- Recommended: CIS 100 or CIS 101 or equivalent  
- Note: Credit by examination option available  

This course helps students to develop proficiency in Adobe Photoshop Elements; it covers acquiring, organizing, fixing, enhancing and sharing images. CSU

**CIS-131 Adobe Flash - Comprehensive**  
2 units SC  
- May be repeated once  
- 36 hours lecture/18 hours laboratory per term  
- Recommended: CIS 100 or CIS 101 or equivalent  
- Note: Credit by examination option available  

This course is for students who want to learn the comprehensive functions and have a deeper understanding of Adobe Flash. This program, which is part of the Adobe Creative Suite, is a web authoring and web animation software that is used industry wide. No previous experience with this software is required. CSU

**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  
- Note: Credit by examination option available  

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  
- Note: Credit by examination option available  

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
- Note: Credit by examination option available

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
- Note: Credit by examination option available

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 classes. 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
- Note: Credit by examination option available

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-181 Project Management Fundamentals/ PMI PMP Prep
3 units SC
- 54 hours lecture per term
- Recommended: CIS 180 or equivalent
- Note: Credit by examination option available

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
- Note: Credit by examination option available

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
- Note: Credit by examination option available

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.

Math and Computer Sciences Division
Rachel Westlake, Dean
Math Building 267
925-685-1230 ext. 2359

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.

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

Associate in science degree
Microsoft Windows system administration
Certificate of achievement
Microsoft Windows system administration

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 higher and maintain an overall GPA of 2.5 or higher in the coursework required for the certificate.

Certificate of achievement - Microsoft Windows systems administration

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
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</thead>
<tbody>
<tr>
<td>BUS 250 Business Communications I</td>
<td>3</td>
</tr>
<tr>
<td>CNT 105 Computer Networking Hardware/Software</td>
<td>3</td>
</tr>
<tr>
<td>CNT 114 Microsoft Windows Operating System Essentials/Administration</td>
<td>3</td>
</tr>
<tr>
<td>CNT 117 Implementing Microsoft Windows Directory Services</td>
<td>3</td>
</tr>
<tr>
<td>CNT 118 Implementing a Microsoft Windows Network Infrastructure</td>
<td>3</td>
</tr>
<tr>
<td>CNT 223 Designing a Secure Microsoft Windows Network</td>
<td>3</td>
</tr>
<tr>
<td>COMTC 110 Introduction to Computer Hardware/Software</td>
<td>4</td>
</tr>
<tr>
<td>COMTC 118 Introduction to Operating Systems</td>
<td>4</td>
</tr>
</tbody>
</table>

plus at least 6 units from:

<table>
<thead>
<tr>
<th>major requirements</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNT 131 Database Administration</td>
<td>4</td>
</tr>
<tr>
<td>CNT 138 Implementing and Managing Microsoft Exchange Server</td>
<td>3</td>
</tr>
</tbody>
</table>

total minimum required units 33

Prerequisites

Students who intend to transfer to a four-year program should consult with a counselor regarding other course requirements. To earn a degree or higher in the coursework for the major and complete all graduation requirements as listed in the catalog. Some courses may satisfy both major and other graduation requirements; however, the units are only counted once.

Program level student learning outcomes
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total minimum required units 33

Prerequisites

Math and Computer Sciences Division
Rachel Westlake, Dean
Math Building 267
925-685-1230 ext. 2359

Possible career opportunities
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Certificate of achievement - Microsoft Windows systems administration

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Prerequisites

Students who intend to transfer to a four-year program should consult with a counselor regarding other course requirements. To earn a degree or higher in the coursework for the major and complete all graduation requirements as listed in the catalog. Some courses may satisfy both major and other graduation requirements; however, the units are only counted once.
plus at least 6 units from:

- CNT 131 Database Administration .............................. 4
- CNT 138 Implementing and Managing Microsoft Exchange Server................................. 3

Total minimum required units 33

**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 the practical aspects of design, installation, testing, and troubleshooting cable carrying voice, data, and video signals. 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 terminate and test copper and fiber-optic cable. After completion of this course, students are able to be FOA certified. CSU

**CNT-105 Computer Networking Hardware/Software**
3 units SC
- **May be repeated once**
- **54 hours lecture per term**
- **Recommended: COMSC 100 or equivalent**
- **Note: May be repeated once when software and networking technologies are upgraded**

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 and Computer Technical Support programs. CSU

**CNT-114 Microsoft Windows Operating System Essentials/Administration**
3 units SC
- **45 hours lecture/27 hours laboratory per term**
- **Recommended: CNT 105 or equivalent; COMSC 100 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
- **45 hours lecture/27 hours laboratory per term**
- **Recommended: CNT 114 or equivalent**
- **Note: May be repeated once when software and networking technologies are upgraded**

Students will learn to install and configure Microsoft Windows Professional on stand-alone computers and on client computers that are part of a workgroup or a domain. In addition, this course provides the skills and knowledge necessary to install and configure Windows Server and to create file, print, and Terminal Servers. Students will administer an organizational unit within a single domain structure. CSU

**CNT-117 Implementing Microsoft Windows Directory Services**
3 units LR
- **45 hours lecture/27 hours laboratory per term**
- **Recommended: CNT 116 or equivalent**
- **Note: May be repeated once when software and networking technologies are upgraded**

Students will learn to install, configure, and administer Microsoft Windows Active Directory directory services. The course also focuses on implementing Group Policy and understanding the Group Policy tasks required to centrally manage users and computers. Students will use Group Policies to configure and manage the user desktop environment, to configure and manage software, and implement and manage security settings. Students will install and manage Windows Domains and Domain Controllers through Active Directory. CSU

**CNT-118 Implementing a Microsoft Windows Network Infrastructure**
3 units LR
- **45 hours lecture/27 hours laboratory per term**
- **Recommended: CNT 116 or equivalent**
- **Note: May be repeated once when software and networking technologies are upgraded**

This course will enable students to install, configure, manage and support a network infrastructure that uses the Microsoft Windows Server products. The course focuses heavily on TCP/IP and related services, including DHCP Server service, DNS Server service, WINS, network security protocols, Public Key Infrastructure (PKI), Internet Protocol Security (IPSec), and remote access. The course also enables the student to configure Windows as a network router, configure Internet access for a network, configure a Web server, and manage a Windows deployment using Remote Installation Services (RIS). CSU
CNT-131  Database Administration  
4 units  LR  
• May be repeated once  
• 54 hours lecture/54 hours laboratory per term  
• Recommended: COMSC 105 or equivalent  
• Note: Refer to course schedule for specific Oracle and SQL Server versions  
This course is designed to give the database administrator (DBA) a firm foundation in basic administrative tasks and provide the necessary knowledge and skills to set up, maintain, and troubleshoot a database. Both Oracle and SQL Server are covered. CSU

CNT-135  SQL Programming  
4 units  LR  
• May be repeated once  
• 54 hours lecture/54 hours laboratory per term  
• Recommended: COMSC 110 or ENGIN 135 or equivalent  
• Note: Refer to course schedule for specific Oracle and SQL Server versions  
This course covers the creation and maintenance of databases and tables. It also covers storage, retrieval and manipulation of data. Both Oracle and Microsoft SQL Server are covered, including SQL script that is common to both, and product-specific variations. CSU

CNT-138  Implementing and Managing Microsoft Exchange Server  
3 units  LR  
• May be repeated once  
• 45 hours lecture/27 hours laboratory per term  
• Note: Refer to course schedule for specific Exchange Server version  
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 multisite enterprise environment, establishing messaging connectivity over the Internet, and supporting Web access to Exchange Server computers through Microsoft Outlook Web Access. CSU

CNT-148  Network Security and Ethical Hacking  
3 units  SC  
• 36 hours lecture/18 hours laboratory per term  
• Recommended: CNT 114 or equivalent  
• Note: Wireless and wired network security will be explored  
Students will learn about cyber attacks on computers and networks, and how to protect systems from such attacks. Students will learn legal restrictions and ethical guidelines, and will be required to obey them. Students will perform many hands-on labs, both attacking and defending, using port scans, footprinting, exploiting Windows and Linux vulnerabilities, buffer overflow exploits, privilege escalation, Trojans, backdoors and more. This course is a beginning foundation for the preparation of the following certifications: Certified Ethical Hacker (CEH), Certified Information Systems Security Professional (CISSP), Cisco Certified Security Professional (CCSP), Security+, and Microsoft Security Certification. CSU

CNT-150  Topics in Computer Networking  
.3-4 units  SC  
• May be repeated three times  
• Variable hours  
A supplemental course in computer networking to provide a study of current concepts and problems in networking. Specific topics will be announced in the schedule of classes. CSU

CNT-161  Router Configuration and Implementation  
2 units  SC  
• May be repeated once  
• 27 hours lecture/27 hours laboratory per term  
• Recommended: CNT 105 or equivalent  
This course is designed to introduce students to router configuration and implementation. Instruction includes safety, router commands, router bootup process, router IOS backup and restore process, TCP/IP addressing implementation, dynamic routing, and the administrator's role and function. This course is part of the preparation for the Cisco Certified Networking Associate (CCNA) certification. CSU

CNT-223  Designing a Secure Microsoft Windows Network  
3 units  LR  
• 45 hours lecture/27 hours laboratory per term  
• Recommended: CNT 117 or equivalent  
• Note: May be repeated once when software and networking technologies are upgraded  
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 095, 100, 100L)

b. Computer science transfer students planning to major in Computer Science or computer engineering at a four-year school (COMSC 105, 110, 210, 255, 260, and 265)

c. Information systems (programming) professionals who are seeking to update their skills, (COMSC 098, 171, 172, 245, 255, 265, 266 and 267)

Math and Computer Science Division
Rachel Westlake, Dean
Math Building 267
925-685-1230 ext. 2609

Possible career opportunities
Study in computer science prepares students for careers in programming, computer operations, systems analysis and engineering, and web design, as well as artificial intelligence, robotics, and software engineering and development. Some career options may require more than two years of college study.

Besides offering courses designed to meet lower-division requirements for a major in computer science, there is also a wide variety of courses covering current popular topics and new software development tools and languages. Such courses provide a path for working professionals to upgrade their skill-set and keep abreast with current technology.

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

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 higher, and complete all graduation requirements as listed in the catalog. Some courses may satisfy both major and other graduation requirements; however the units are only counted once.

major requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>COMSC 110 Introduction to Programming</td>
<td>4</td>
</tr>
<tr>
<td>COMSC 210 Program Design and Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>COMSC 260 Assembly Language Programming/</td>
<td>4</td>
</tr>
<tr>
<td>Computer Organization</td>
<td></td>
</tr>
</tbody>
</table>

in addition, the student must complete either

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>COMSC 265 Advanced Programming with C and C++</td>
<td>4</td>
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<tr>
<td>COMSC 266 Object Oriented Programming with C++</td>
<td>4</td>
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</table>

or

<table>
<thead>
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<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>COMSC 255 Programming with Java</td>
<td>4</td>
</tr>
<tr>
<td>COMSC 256 Advanced Programming with Java</td>
<td>4</td>
</tr>
</tbody>
</table>

total minimum required units 20

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 higher.* 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

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>BUSAC 186 Principles of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>COMSC 110 Introduction to Programming</td>
<td>4</td>
</tr>
<tr>
<td>COMSC 210 Program Design and Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>COMSC 260 Assembly Language Programming/</td>
<td>4</td>
</tr>
<tr>
<td>Computer Organization</td>
<td></td>
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plus at least 4 units from:

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>COMSC 100 Introduction to Computers and Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>COMSC 100L Introduction to Computer Software</td>
<td>1</td>
</tr>
<tr>
<td>COMSC 105 Introduction to Computer Science</td>
<td>4</td>
</tr>
</tbody>
</table>
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 higher. Certificate requirements may only be completed by attending a combination of day and evening classes.

*Up to 11 units may be P

required courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAC 186</td>
<td>Principles of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>BUS 250</td>
<td>Business Communications I</td>
<td>3</td>
</tr>
<tr>
<td>COMSC 100</td>
<td>Introduction to Computers and Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>COMSC 100L</td>
<td>Introduction to Computer Software</td>
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<tr>
<td>COMSC 110</td>
<td>Introduction to Programming</td>
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</tr>
<tr>
<td>BUSAC 185</td>
<td>QuickBooks Accounting for Business I</td>
<td>1.5</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>
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</tr>
<tr>
<td>COMSC 95</td>
<td>WWW Publishing with HTML</td>
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</tr>
<tr>
<td>COMSC 96</td>
<td>Advanced WWW Publishing</td>
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plus at least 12 units from:

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<td>COMSC 97</td>
<td>Advanced HTML - Style Sheets and DHTML</td>
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</tr>
<tr>
<td>COMSC 171</td>
<td>Introduction to UNIX and Linux</td>
<td>2</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 and C++</td>
<td>4</td>
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<tr>
<td>COMSC 266</td>
<td>Object Oriented Programming with C++</td>
<td>4</td>
</tr>
<tr>
<td>COMSC 267</td>
<td>Windows Programming with C#</td>
<td>4</td>
</tr>
</tbody>
</table>

total minimum required units 35

** Up to 4 units total may be from COMSC 150.

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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 web page 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 web page. It will also cover DHTML techniques for creating animations. This class will open opportunities for students who want to be more involved in web page programming.

**COMSC-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 by arrangement 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. CSU, UC (credit limits may apply to UC - see counselor)

**COMSC-100L** Introduction to Computer Software  
1 unit SC  
- 54 hours laboratory per term  
- Recommended: Concurrent enrollment in COMSC 100  
The student will learn to use 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. The hands-on computer work will augment the basic concepts covered in COMSC 100. CSU, UC (credit limits may apply to UC - see counselor)

**COMSC-105** Introduction to Computer Science  
4 units SC  
- 54 hours lecture/54 hours laboratory per term  
- Recommended: COMSC 100 or equivalent; COMSC 100L or equivalent  
- 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-110X** Extended Introduction to Programming  
2 units P/NP  
- 27 hours lecture/27 hours laboratory per term  
- Prerequisite: COMSC 110 or equivalent  
- Note: The four-unit COMSC 110 is offered in either C++ or Java. Students cannot repeat COMSC 110 for the purpose of taking it in a different language. COMSC 110X offers this opportunity, in a compare and contrast context, without repeating the programming concepts taught in COMSC 110.  
An extension of COMSC 110, allowing students to take the programming language portion of COMSC 110 in another language (C++ or Java).

**COMSC-120** SQL Programming  
4 units SC  
- 54 hours lecture/54 hours laboratory per term  
- Recommended: COMSC 110 or ENGIN 135 or equivalent  
- Note: Refer to class schedule for specific Oracle and SQLServer versions  
This course covers the creation and maintenance of databases and tables. It also covers the storage, retrieval and manipulation of data. Both Oracle and Microsoft SQLServer are covered, including SQL script that is common to both, and product-specific variations. CSU

**COMSC-121** Database Administration  
4 units SC  
- 54 hours lecture/54 hours laboratory per term  
- Recommended: COMSC 105 or equivalent  
- Note: Refer to class schedule for specific Oracle and SQLServer versions  
This course is designed to give the database administrator (DBA) a firm foundation in basic administrative tasks and provide the necessary knowledge and skills to set up, maintain, and troubleshoot a database. Both Oracle and SQLServer are covered. CSU

**COMSC-138** Using Visual Basic for Applications  
2 units SC  
- 27 hours lecture/27 hours laboratory per term  
- Recommended: COMSC 100L or equivalent  
This course teaches the use of Visual Basic for Applications (VBA) in the applications of the Microsoft Office Suite, including Word, Excel, PowerPoint and Access. Topics include the tools, properties, 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 095 or equivalent  
This course introduces eXtensible Markup Language (XML) Documents. Students will learn the difference between HTML and XML and learn how to use XSL transformations. CSU
COMSC-150  Topics in Computer Science 3-4 units SC
- May be repeated three times
- Variable hours
- 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 classes. CSU

COMSC-171  Introduction to UNIX and Linux 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 and Linux operating systems. Topics include: terminals, shells, processes, permissions, utility programs, editors, using network services, shell and AWK scripting, and X Window graphics. CSU, UC

COMSC-172  UNIX and Linux Administration 2.5 units SC
- 32 hours lecture/40 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 include installation, booting, hardware configuration, kernel configuration, TCP/IP configuration, X Window configuration, user management, BOOTP/DHCP servers, routing, DNS servers, file servers, email, web servers, backup and security. CSU, UC

COMSC-210  Program Design and Data Structures 4 units LR
- 54 hours lecture/54 hours laboratory per term
- Prerequisite: 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. CSU, UC

COMSC-255  Programming with Java 4 units SC
- 54 hours lecture/54 hours laboratory per term
- Recommended: COMSC 110 or equivalent

This course emphasizes programming techniques using the Java programming language. The syntax and deployment of Java applications are reviewed. Advanced topics such as objects, classes, methods, OOP principles, GUI interfaces, I/O, data structures, applets, networking, and threads are covered. CSU, UC

COMSC-256  Advanced Java Programming 4 units SC
- 54 hours lecture/54 hours laboratory per term
- Recommended: COMSC 255 or equivalent

This course will cover advanced topics in Java programming including multithreading, exception handling, serialization, reflection, model view controller architecture, Java beans, servlets and database connectivity. CSU, UC

COMSC-257  Enterprise Java Programming 4 units SC
- 54 hours lecture/54 hours laboratory per term
- Recommended: COMSC 255 or equivalent

The course covers the server side programming in Java including features of the Enterprise Edition (Java EE). Topics include Enterprise Java Beans (EJBs), application servers, Remote Method Invocation, Servlets, Naming and Directory Services, Message and Web Services, Peer-To-Peer Services, and other facilities provided in Java EE. CSU

COMSC-259  Advanced Programming With C and C++ 4 units SC
- 54 hours lecture/54 hours laboratory per term
- Prerequisite: COMSC 110 or ENGIN 135 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. CSU, UC

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. 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 ENGIN 135 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. CSU, UC

COMSC-266  Object Oriented Programming C++ 4 units SC
- 54 hours lecture/54 hours laboratory per term
- Prerequisite: 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. CSU, UC
Computer technical support

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.

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

Associate in science degree
Computer technical support

Certificate of achievement
Computer technical support

Certificate of accomplishment
Computer technical support

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 higher and maintain an overall GPA of 2.5 or higher in the coursework required for the certificate. Certificate requirements are available in the evening, day and on weekends.

required courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 250</td>
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</tr>
<tr>
<td>CNT 103</td>
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<tr>
<td>CNT 105</td>
<td></td>
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<tr>
<td>CNT 114</td>
<td></td>
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<tr>
<td>COMSC 100L</td>
<td></td>
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<tr>
<td>COMSC 105</td>
<td></td>
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<tr>
<td>COMTC 110</td>
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<tr>
<td>COMTC 118</td>
<td></td>
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<tr>
<td>COMTC 120</td>
<td></td>
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<tr>
<td>total minimum required units</td>
<td>27</td>
</tr>
</tbody>
</table>

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 higher and maintain an overall GPA of 2.5 or higher in the coursework required for the certificate. Certificate requirements are available in the evening and some are offered in the day and on weekends.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMTC 110 Introduction to Computer Hardware/Software</td>
<td>4</td>
</tr>
<tr>
<td>COMTC 118 Introduction to Operating Systems</td>
<td>4</td>
</tr>
<tr>
<td>CNT 105 Computer Networking Hardware/Software</td>
<td>3</td>
</tr>
<tr>
<td>CNT 114 Microsoft Windows Operating System Essentials/Administration</td>
<td>3</td>
</tr>
<tr>
<td>Total Minimum Required Units</td>
<td>14</td>
</tr>
</tbody>
</table>

**COMTC-110 Introduction to Computer Hardware/Software**
4 units LR
- May be repeated once
- 54 hours lecture/54 hours laboratory per term
- Formerly COMTC 110B

This is an introductory level course for students who have no computer hardware experience. Students will build and configure a variety of computer systems, and learn how to do basic hardware and operating system troubleshooting and repair. This course will also include topics in networking, printers, data acquisition and robotic controls. CSU

**COMTC-115 A+ Exam Preparation**
2 units SC
- 36 hours lecture/18 hours laboratory per term
- Recommended: COMTC 110 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

**CONSTRUCTION – CONST**

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

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

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 higher. Certificate requirements can be completed by attending classes in the day, the evening, or both.

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONST 114 Blueprint Reading</td>
<td>3</td>
</tr>
<tr>
<td>CONST 124 Construction Details and Specifications</td>
<td>3</td>
</tr>
<tr>
<td>CONST 170 Fundamentals of Building Inspection</td>
<td>3</td>
</tr>
<tr>
<td>CONST 181 Building Code Interpretation: Non-Structural</td>
<td>3</td>
</tr>
<tr>
<td>CONST 182 Building Code Interpretation: Structural</td>
<td>3</td>
</tr>
<tr>
<td>CONST 183 Title 24: Energy Conservation Codes</td>
<td>3</td>
</tr>
<tr>
<td>CONST 191 Plumbing Code Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>CONST 192 Mechanical Code Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>CONST 266 Electrical Codes: Articles 90-398</td>
<td>3</td>
</tr>
<tr>
<td>CONST 267 Electrical Codes: Articles 400-830</td>
<td>3</td>
</tr>
<tr>
<td>CONST 273 Construction Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Total minimum required units: 33

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 higher. Certificate requirements can be completed by attending classes in the day, the evening, or both.

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSMG 120 Introduction to Management Studies</td>
<td>3</td>
</tr>
<tr>
<td>BUSMG 121 Practices and Concepts of Supervision</td>
<td>3</td>
</tr>
<tr>
<td>CONST 114 Blueprint Reading</td>
<td>3</td>
</tr>
<tr>
<td>CONST 116 Plane Surveying</td>
<td>3</td>
</tr>
<tr>
<td>CONST 124 Construction Details and Specifications</td>
<td>3</td>
</tr>
<tr>
<td>CONST 244 Estimating - Residential</td>
<td>3</td>
</tr>
<tr>
<td>CONST 245 Estimating - Commercial</td>
<td>3</td>
</tr>
<tr>
<td>CONST 273 Construction Management Studies</td>
<td>3</td>
</tr>
<tr>
<td>CONST 276 Legal Aspects-Construction Industry</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 130 Introduction to Technical Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

Total minimum required units: 30

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

3 units SC
- 54 hours lecture per term

Blueprint reading for the building industry. CSU

CONST-116 Plane Surveying

3 units SC
- 54 hours lecture/54 hours laboratory per term
- Prerequisite: MATH 121 or equivalent
- Note: Same as ENGIN 140

Principles and practices of surveying including measurement of distances, directions and elevations; measuring standards; introduction to electronic measurements and metric units; calibration, systematic and random error analysis; traverse calculations; use and care of surveying instruments including tapes, transits and levels; GPS measurements; map reading; horizontal and vertical curves and mapping. CSU, UC
**CONST-124 Construction Details and Specifications**
3 units SC  
- 54 hours lecture per term
Advanced study of construction detailing and specifications for building systems from foundations to roofs, including windows and doors, thermal and moisture protection, stairs and elevators and metal fabrications for wood frame, reinforced concrete, structural steel, and heavy timber buildings. Interpretation and sketching of details as well as an introduction to the general conditions for the construction contract. Techniques required to produce construction drawings and specifications conforming to current building codes and standards, including using manual drawing techniques and computer aided drafting. CSU

**CONST-170 Fundamentals of Building Inspection**
3 units SC  
- 54 hours lecture per term
A study of basic construction inspection procedures, and the inspector’s legal responsibility. Covered topics include: inspecting structures, occupancy types, safety, and proper record keeping. 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. Credit by examination option available.
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 (Commercial)**
4 units SC  
- 54 hours lecture/54 hours laboratory per term
A study of the processes of heavy construction including covering plans, construction sites, layout, substructures and superstructures made of concrete, steel, masonry 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-170 Fundamentals of Building Inspection**
3 units SC  
- 54 hours lecture per term
A study of basic construction inspection procedures, and the inspector’s legal responsibility. Covered topics include: inspecting structures, occupancy types, safety, and proper record keeping. CSU

**CONST-180 Building Codes Use and Occupancy Types**
3 units SC  
- May be repeated once  
- 54 hours lecture per term
Acquaints the student with legal requirements associated with building classification. Development of checklists and knowledge of a nonstructural plan check review. CSU

**CONST-181 Building Code Interpretation: Non-Structural**
3 units SC  
- May be repeated once  
- 54 hours lecture per term
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: MATH 110 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 Codes**
3 units SC  
- May be repeated once  
- 54 hours lecture per term
This course is an overview of Title 24 energy conservation and energy compliance codes. Focus of the course is on building plan inspection and construction field inspection. Course includes energy projects, streamlining energy compliance forms review, case studies and reviewing plan checking and building inspection procedures. CSU

**CONST-191 Plumbing Code Interpretation**
3 units SC  
- May be repeated once  
- 54 hours lecture per term  
- Note: May be repeated when code changes
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  
Acquaints the students with legal requirements associated with building inspection. 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 114 or equivalent and CONST 136 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  
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 and responsibilities of a construction supervisor, superintendent, or contractor. Emphasis will be given to contracts and their interpretations. Emphasis on the practical aspects of legal theories, codes, and cases applied to the construction industry. CSU

**CONST-298 Independent Study**  
.5-3 units SC  
- May be repeated three times  
- Variable hours  
- Note: 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

**CONST-299 Student Instructional Assistant**  
.5-3 units SC  
- May be repeated three times  
- Variable hours  
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.  
Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU
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.

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 is facilitated by the use of learning objectives. CSU

COOP-170A Internship in Occupational Work Experience Education
1-4 units SC
- May be repeated three times
- Variable hours
- Note: Approval by Career and Employment Services Office. Hours by arrangement - 1 unit for 5 hours per week or 75 hours per semester (paid work). 1 unit for 4 hours per week or 60 hours work per term (unpaid work).

The plan combines college study and work to give students the broadest possible preparation for a career. An internship involves working in a skilled or professional level assignment in the area of a student’s vocational or academic major or interest. Internships may be paid, non paid, or some partial compensation provided. The duration of an Internship is one to four terms, four to twenty hours per week. Intern program students earn college credit through the Department of Cooperation Work Experience Education. CSU

COUNSELING – COUNS

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
0.3-4 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 classes.
COUNS-095 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. Please purchase a Starter Kit at the DVC Book Center prior to class meeting.
- Formerly COUNS 105

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 selecting and scheduling), geographical orientation, counseling and advising.

COUNS-096 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
- Formerly COUNS 106

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-097 Orientation to College for International Students
.3-2 units P/NP
- Variable hours
- Formerly COUNS 107

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 (Department 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 Transfer Transitions
1.5 units SC
- 27 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent

Through this course students research, evaluate and develop a transfer plan that is well organized and specific to the individual’s life circumstance and educational goals. Students explore the world of transfer from academic, financial, and personal development perspectives. A key component of this course is learning research skills and strategies using a variety of techniques to find, retrieve and evaluate transfer planning information. CSU

COUNS-150 Topics in Counseling
.3-4 units SC
- May be repeated three times
- Variable hours

A supplemental course designed to provide personal and social development skills related to academic issues. Specific topics will be announced in the schedule of classes. CSU

COUNS-155 Topics in Group Counseling
.3-4 units P/NP
- May be repeated three times
- Variable hours
- Formerly COUNS 100

An interpersonal experience designed to develop self-awareness and to increase understanding of and competence in interpersonal relationships.
CULINARY ARTS – CULN

Business Division
Ellen Kruse, Interim Dean
Business and Foreign Language Building 204
925-685-1230 ext. 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 foodservice 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, caterer or manager, and food editor. Some career options may require more than two years of college study.

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

Associate in science degree - Hospitality studies
The associate in science degree in hospitality studies prepares students for entry into mid-level employment in one of three specialty areas of the hospitality and culinary arts industry: baking and pastry, culinary arts, restaurant management. This in-depth, hands-on program of study prepares students for a professional hospitality and culinary career in a broad scope of industry opportunities in the following areas of specialization:

Baking and pastry:
For over 30 years, DVC has been successfully preparing students for professional careers in small and large bakeries, specialty pastry shops, catering and dessert preparation in restaurants. Diablo Valley College's baking and pastry program offers an in-depth, hands-on learning curriculum where students gain both knowledge and experience through the hotel and restaurant management program's technical facilities. In addition to training at the DVC facilities, students gain experience working outside the college through a required internship program. DVC's associate degree in hospitality studies with a specialization in baking and pastry is designed primarily for those students who desire to complete a two-year degree. General Education Option 1 (DVC General Education) is appropriate for students who do not intend to transfer. Students who are interested in pursuing a management-focused program in hospitality should see a counselor and consider the General Education Requirements Options 2 or 3.

Culinary arts:
For over 30 years, DVC has been successfully preparing students for professional culinary careers. Accredited by the American Culinary Federation since 1990, Diablo Valley College's culinary arts program offers an in-depth, hands-on learning curriculum where students gain both knowledge and experience through the hotel and restaurant management program's technical facilities. In addition to training at the DVC facilities, students gain experience working outside the college through a required internship program. DVC's associate degree in hospitality studies with a specialization in culinary arts is designed primarily for those students who desire to complete a two-year degree. General Education Option 1 (DVC General Education) is appropriate for students who do not intend to transfer. Students who are interested in pursuing a management-focused program in hospitality should see a counselor and consider the General Education Options 2 or 3.

Restaurant management:
For over 30 years, DVC has been successfully preparing students for professional careers in restaurant management. Accredited by the American Culinary Federation since 1990, Diablo Valley College's restaurant management program offers an in-depth, hands-on learning curriculum where students gain both knowledge and experience through the hotel and restaurant management program's technical facilities. Restaurant management students work and learn in a fully equipped food production kitchen, a
Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file in the Culinary Department Office by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. To earn an associate in science degree, students must complete each course used to meet a certificate requirement with a “C” grade or higher and maintain an overall GPA of 2.5 or higher in the coursework required for the degree.

Students are limited to one associate in science degree regardless of the number of specializations completed. Multiple certificates may be awarded.

**major requirements**

<table>
<thead>
<tr>
<th>core courses</th>
<th>units</th>
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</thead>
<tbody>
<tr>
<td>CULN 105  Introduction to the Kitchen</td>
<td>0.5</td>
</tr>
<tr>
<td>CULN 110  Orientation to Hospitality</td>
<td>3</td>
</tr>
<tr>
<td>CULN 115  Culinary Mathematics</td>
<td>1.5</td>
</tr>
<tr>
<td>CULN 120  Fundamentals of Cuisine</td>
<td>5</td>
</tr>
<tr>
<td>CULN 153  Safety and Sanitation</td>
<td>2</td>
</tr>
<tr>
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<td>2</td>
</tr>
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</tr>
<tr>
<td>CULN 195  Supervisory Management in Food Services</td>
<td>3</td>
</tr>
<tr>
<td>CULN 224  Catering Business and Operations</td>
<td>2</td>
</tr>
</tbody>
</table>

*plus a minimum of 2 units from:*

| COOP 170  Occupational Work Experience Education  | 1-4   |
| COOP 170A Internship in Occupational Work Experience | 1-4 |

*plus a minimum of 2.5 units from:*

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

Choose one of the following three specialization areas:

**baking and pastry**

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CULN 180  Fundamentals of Baking</td>
<td>3.5</td>
</tr>
<tr>
<td>CULN 280  Advanced Pastry and Baking</td>
<td>5</td>
</tr>
</tbody>
</table>

*plus a minimum of 2 units from:*

| CULN 150  Topics in Culinary Arts                   | 0.3-4 |
| CULN 215  Decorative Confectionary Showpieces       | 1     |

**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.

Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file in the Culinary Department Office by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or higher. Certificate requirements may only be completed by attending a combination of day and evening classes.

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</tr>
<tr>
<td>CULN 280  Advanced Pastry and Baking</td>
<td>5</td>
</tr>
</tbody>
</table>

**program at a university. These students should see a counselor and consider the General Education Requirements Options 2 or 3.**

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 153  Safety and Sanitation                      2
CULN 185  Nutritional Guidelines in Food Preparation 2
CULN 190  Purchasing Systems and Operations          2
CULN 191  Purchasing Systems and Operations          2
CULN 224  Supervisory Management in Food Systems     3
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.

Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file in the Culinary Department Office by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or higher. Certificate requirements may only be completed by attending a combination of day and evening classes.

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.

Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file in the Culinary Department Office by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or higher. Certificate requirements may only be completed by attending a combination of day and evening classes.

Required courses

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<tr>
<td>CULN 127</td>
<td>Garde Manger</td>
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</tr>
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<td>Safety and Sanitation</td>
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</tr>
<tr>
<td>CULN 154</td>
<td>Menu Development and Planning</td>
<td>2</td>
</tr>
<tr>
<td>CULN 160</td>
<td>Fundamentals of Beverage, Wine and Spirits</td>
<td>3</td>
</tr>
<tr>
<td>CULN 165</td>
<td>Dining Room Operations</td>
<td>2</td>
</tr>
<tr>
<td>CULN 166</td>
<td>Dining Room Operations Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>CULN 175</td>
<td>Meat, Poultry and Fish Fabrication</td>
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</tbody>
</table>

Total minimum required units: 38

Plus at least 2 units from:

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

Total minimum required units: 49

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.

Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file in the Culinary Department Office by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or higher. Certificate requirements may only be completed by attending a combination of day and evening classes.

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<tr>
<td>CULN 166</td>
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<tr>
<td>CULN 225</td>
<td>Laboratory Topics in Catering and Special Events</td>
<td>0.3-4</td>
</tr>
</tbody>
</table>

Plus at least 2 units from:

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

Total minimum required units: 49.5

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.

CULN-105  Introduction to the Kitchen
.5 unit SC
• 27 hours laboratory per term
• Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

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
• Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

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 Mathematics
1.5 units SC
• 27 hours lecture per term
• Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

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
• Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

This course builds on basic student skills in knife, tool and culinary equipment handling, introduces basis food preparation, and provides a working knowledge of laws and regulations relating to safety and sanitation in the kitchen. The emphasis is on quantity food service. CSU

CULN-127  Garde Manger
2 units SC
• 18 hours lecture/54 hours laboratory per term
• Prerequisite: CULN 120 or equivalent
• Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

A study of the artistic side of cold food preparation from 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
• Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

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 classes. CSU

CULN-153  Safety and Sanitation
2 units SC
• 36 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent
• Note: Culinary and food service students must have a current record of satisfactory TB screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

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-154  Menu Development and Planning
2 units  SC
- 36 hours lecture per term
- Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

This course provides learners with an opportunity to plan and develop basic restaurant menus, displaying a diversity of techniques and flavors within a variety of food service establishments. Healthy menus, culturally diverse menus, seasonal and regional menus are addressed. CSU

CULN-160  Fundamentals of Beverage, Wine and Spirits
3 units  SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
- Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

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 and non-alcoholic beverages, coffee and tea. CSU

CULN-165  Dining Room Operations
2 units  SC
- 36 hours lecture per term
- Co-requisite: CULN 166 or equivalent
- Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

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
- Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

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-175  Meat, Poultry and Fish Fabrication
2 units  SC
- 36 hours lecture per term
- Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

This course provides students with a comprehensive meat identification process, including cuts, buying and ordering procedures, nutrition data, food safety and storage, and USDA grading standards. CSU

CULN-180  Fundamentals of Baking
3.5 units  SC
- 18 hours lecture/135 hours laboratory per term
- Prerequisite: CULN 105 or equivalent (may be taken concurrently)
- Co-requisite: CULN 153 or equivalent
- Recommended: Eligibility for ENGL 122 or equivalent
- Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

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 area. CSU

CULN-185  Nutritional Guidelines in Food Preparation
2 units  SC
- 36 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
- Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

Introduction to food composition, dietary guidelines, recipe modification, food cooking and storage techniques for nutrient retention, and contemporary nutritional issues. CSU
CULN-190  Purchasing Systems and Operations
2 units  SC
- 36 hours lecture per term
- Co-requisite: CULN 191 or equivalent
- Recommended: Eligibility for ENGL 122 or equivalent; MATH 110 or equivalent
- Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

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 applications. CSU

CULN-191  Purchasing Systems and Operations Laboratory
2 units  SC
- May be repeated three times
- 108 hours laboratory per term
- Co-requisite: CULN 153 or equivalent and CULN 190 or equivalent
- Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

This course is a laboratory application of inventory control, food storage, and receiving. Purchasing food merchandise based on analysis of quality, yield, cost of food, purchase control and issuing procedures using current computer applications. CSU

CULN-195  Supervisory Management in Food Services
3 unit  SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
- Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

This course focuses on application of supervisory management principles to specific business situations in food services. CSU

CULN-201  Principles of Food, Beverage, and Labor Cost Control
3 units  SC
- 54 hours lecture per term
- Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

This course prepares students to apply cost control measures in restaurant and beverage management. Key principles and concepts are presented, and cost controls are demonstrated for each phase of beverage and food service operations. CSU

CULN-215  Decorative Confectionary Showpieces
1 unit  SC
- 18 hours lecture per term
- Recommended: CULN 180 or equivalent
- Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

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
- Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

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
- Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

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 dressings, and composition of effective menu items are integrated into the food preparation activities. CSU
CULN-224  Catering Business and Operations  
2 units  SC  
- 36 hours lecture per term  
- Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

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  SC  
- May be repeated three times  
- Variable hours  
- Co-requisite: CULN 153 or equivalent  
- Recommended: CULN 120 or equivalent; eligibility for ENGL 122 or equivalent  
- Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

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. Refer to the schedule of classes for the specific section offering. CSU

CULN-226  California Cuisine  
2 units  SC  
- May be repeated once  
- 27 hours lecture/27 hours laboratory per term  
- 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. Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

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  
- Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

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  
- Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

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-.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.  
- Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

An opportunity for selected students to pursue special interests under direction of the faculty. CSU
CULN-299  Student Instructional Assistant
.5-3 units SC
• May be repeated three times
• Variable hours
• Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor. Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary offices by the beginning of classes. Students are required to supply their own equipment and uniforms depending on the class. See instructor at the first class meeting.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

DANCE – DANCE

Physical Education, Athletics and Dance Division
Christine Worsley, Dean
Physical Education Office Building 105
925-685-1230 ext. 2736

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: DANCE 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, UC

DANCE-135 Pointe Technique
1 unit SC
• May be repeated three times
• 54 hours laboratory per term
• Prerequisite: DANCE 133 or equivalent or PEDAN 130 or equivalent
• Formerly PEDAN 133

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, UC

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, UC

DANCE-138 Jazz Dance II
1 unit SC
• May be repeated two times
• 54 hours laboratory per term
• Prerequisite: DANCE 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, UC

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, UC

DANCE-145 Modern Dance II
1 unit SC
• May be repeated two times
• 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, UC
DANCE-201 Western Culture Dance History: 20th Century to Present
3 units SC
• 54 hours lecture per term
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 relation 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, UC

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

DANCE-299 Student Instructional Assistant
.5-3 units SC
• May be repeated three times
• Variable hours
• Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.
Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

DENTAL ASSISTING – DENTL

Biological and Health Sciences Division
Dennis Smith, Dean
Science Center Building 100
925-685-1230 ext. 2357

Possible career opportunities
While most dental assistants find employment in dental offices, opportunities for employment also exist in clinics and hospitals, insurance agencies, dental x-ray laboratories, and supply houses. The dental assisting program provides an excellent path for those interested in a variety of positions in the dental field. With training from the program, students can choose a profession as a dental technician, a small business owner in the dental field, a marketing agent for a commercial laboratory, or a sales representative for a dental supplier. Dental assisting students can also choose to continue their education to become a dental hygienist or a dentist.

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

Associate in science degree
Dental assisting
Certificate of achievement
Dental assisting
Associate in science degree - Dental assisting

The associate in science program in dental assisting prepares students for administrative support and chair side assisting in dental offices, hospitals and clinics, insurance agencies, dental x-ray laboratories and supply houses. The program of classroom instruction and clinical experience, along with general education, leads to the associate degree in dental assisting. To earn a degree, students must complete each of the required courses with a “C” grade or higher and complete all graduation requirements as listed in the catalog. 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 August of their first term.

Program prerequisite:

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

Major requirements

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<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>4</td>
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<tr>
<td>DENTL 172</td>
<td>Dental Radiography I</td>
<td>2.5</td>
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<tr>
<td>DENTL 173</td>
<td>Dental Operative Procedures I</td>
<td>3</td>
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<tr>
<td>DENTL 174</td>
<td>Dental Materials and Laboratory Procedures</td>
<td>3</td>
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<tr>
<td>DENTL 175</td>
<td>Infection Control, Oral Documentation and Theories of Dental Assisting</td>
<td>3</td>
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<tr>
<td>DENTL 180</td>
<td>Office Management</td>
<td>3</td>
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<tr>
<td>DENTL 181</td>
<td>Dental Emergencies, Pharmacology and Oral Pathology</td>
<td>2</td>
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<tr>
<td>DENTL 182</td>
<td>Dental Radiography II</td>
<td>2.5</td>
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<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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<tr>
<td>ENGL 122</td>
<td>Freshman English: Composition and Reading I</td>
<td>3</td>
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<tr>
<td>PSYCH 122</td>
<td>Psychology in Modern Life</td>
<td>3</td>
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<tr>
<td>SPCH 121</td>
<td>Persuasion and Critical Thinking</td>
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Total minimum required units 43.8

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 higher. 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 August of their first term.

Program prerequisite

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Required course

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<tr>
<td>DENTL 175</td>
<td>Infection Control, Oral Documentation 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>
<td>2</td>
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<td>Clinical Experience</td>
<td>7</td>
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<tr>
<td>ENGL 122*</td>
<td>Freshman English: Composition and Reading I</td>
<td>3</td>
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Plus at least 3 units from:

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<tr>
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<th>Units</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>
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</tr>
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</tr>
</thead>
<tbody>
<tr>
<td>PSYCH 101*</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 122*</td>
<td>Psychology in Modern Life</td>
<td>3</td>
</tr>
</tbody>
</table>
Dental assisting

plus at least 3 units from:
SPCH 120* Fundamentals of Speech .......................... 3
SPCH 121* Persuasion and Critical Thinking .................. 3
SPCH 128* Interpersonal Communication ....................... 3

** Note:** Students are expected to take one or two of these courses in the summer prior to entering the program. Those considering applying to the dental hygiene program are required to take English 122, Psychology 122 and Speech 121 unless they hold a baccalaureate degree or higher.

** Recommended Course:**
DENTL 110 Overview of the Dental Profession................ 1.5
(Offered mid-Spring term)

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**DENTL-110 Overview of the Dental Profession**

1.5 units P/NP
- 27 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
- Note: This course is open to all students
- Formerly DENTL 060

An overview of the dental profession with special emphasis on assisting, hygiene and dental technology concepts. This course may be particularly helpful to the students desiring to enter dental assisting, dental hygiene or dental technology programs. CSU

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**DENTL-120 Orientation to the Registered Dental Assisting Program**

.3 unit P/NP
- May be repeated two times
- 6 hours lecture per term
- Note: Students must complete health requirements before the beginning of the fall term. This will allow the student to work on one another, on patients in the 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 registered dental assisting program. The orientation course will provide the student with detailed enrollment information and the health protocol standards for the registered 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, registered 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

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**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 classes. CSU

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**DENTL-171 Oral Facial Structures and Body Systems**

4 units LR
- 54 hours lecture/36 hours laboratory per term
- Prerequisite: DENTL 120 and current American Heart Association or American Red Cross Basic Life Support with Defibrillator Certificate or equivalents
- Recommended: Eligibility for ENGL 122 or equivalent
- Note: Current enrollment in the DVC Registered Dental Assisting program, current TB clearance, hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR Certificate (Basic Life Support for Healthcare Provider with AED) are required

Introduction to general anatomy, body systems, and monitoring patient sedation as related to respiratory and cardiovascular systems. Head and neck anatomy with emphasis on the teeth and their supporting structures. CSU

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**DENTL-172 Dental Radiography I**

2.5 units LR
- 36 hours lecture/36 hours laboratory per term
- Prerequisite: DENTL 120 and current American Heart Association or American Red Cross Basic Life Support with Defibrillator Certificate or equivalents
- Recommended: Eligibility for ENGL 122 or equivalent
- Note: Current enrollment in the DVC Registered Dental Assisting program, current TB clearance, hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR Certificate (Basic Life Support for Healthcare Provider with AED) are required

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. Introduction to digital radiography. The dental assistant’s role in radiography and exposing patients as it pertains to the Dental Practice Act (DPA), State of California. CSU
DENTL-173  Dental Operative Procedures I  
3 units  LR  
- 36 hours lecture/54 hours laboratory per term  
- Prerequisite: DENTL 120 and current American Heart Association or American Red Cross Basic Life Support with Defibrillator Certificate or equivalents  
- Recommended: Eligibility for ENGL 122 or equivalent  
- Note: Current enrollment in the DVC Registered Dental Assisting program, current TB clearance, hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR Certificate (Basic Life Support for Healthcare Provider with AED) are required  

The study, manipulation, and safe handling of dental materials used in operative and restorative dentistry. Characteristics, manipulation, and safe handling of dental laboratory materials and equipment and usage of instruments will also be presented. Emphasis on infection control and safety standards as well as hazards control protocols are stressed throughout the course. CSU  

DENTL-174  Dental Materials and Laboratory Procedures  
3 units  LR  
- 36 hours lecture/54 hours laboratory per term  
- Prerequisite: DENTL 120 and current American Heart Association or American Red Cross Basic Life Support with Defibrillator Certificate or equivalents  
- Recommended: Eligibility for ENGL 122 or equivalent  
- Note: Current enrollment in the DVC Registered Dental Assisting program, current TB clearance, hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR Certificate (Basic Life Support for Healthcare Provider with AED) are required  

Emphasis will be placed on clinical infection control procedures (disinfection, instrument processing and sterilization, waste disposal, types of diseases of particular concern to the dental team, prevention of disease transmission), related national and state regulatory and advisory agencies, and related legal and ethical concerns. Topics also include: documenting medical/dental health histories; taking and recording vital signs; microbiology of dental decay and application of its relationship to the principles of oral hygiene; dental health related diet and nutrition; oral inspection, documentation, and dental charting; orientation to the roles, functions and duties of the members of the dental team, as governed by the Dental Bureau of California and the California Dental Practice Act; and; career pathways of dental assisting, professionalism, dental specialties, and professional dental 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: Current CPR Certificate (Basic Life Support for Healthcare Provider with AED) is recommended  

Front office duties including dental staff management and interaction, patient management, written communication, telecommunication, bookkeeping/financial transactions, dental office documents, dental insurance, appointment management systems, recall systems, inventory systems, and supply ordering. Dental jurisprudence, related ethical concerns, and HIPAA compliance also 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 and current American Heart Association or American Red Cross Basic Life Support with Defibrillator Certificate or equivalents  
- Recommended: Eligibility for ENGL 122 or equivalent  
- Note: Current enrollment in the DVC Registered Dental Assisting program, current TB clearance, hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certificate (Basic Life Support for Healthcare Provider with AED) are required  

A course in dental office preparation, assisting in the management of medical and dental emergencies. Review of legal and ethical responsibilities in the event of a medical or dental emergency. Pathology of the hard and soft tissue 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 and current American Heart Association or American Red Cross Basic Life Support with Defibrillator Certificate or equivalents  
- Recommended: Eligibility for ENGL 122 or equivalent  
- Note: Current CPR certificate (Basic Life Support for Healthcare Provider with AED)  

Emphasizes patient management and radiation safety. Infection control procedures in accordance with OSHA and CDC guidelines and regulations from the Dental Board of California. Perform and evaluate various types of intra-oral and extra-oral radiographs and interpretation thereof.
Advanced principles and practices of dental radiography with emphasis on technique and diagnostic quality of dental x-rays. Continuation of various digital radiography techniques. The dental assistant’s role in radiography and in exposing patients as it pertains to the Dental Practice Act (DPA), state of California. CSU

DENTL-183  Advanced Dental Operative Procedures
4.5 units  LR
- 63 hours lecture/72 hours laboratory per term
- Prerequisite: DENTL 173 and current American Heart Association or American Red Cross Basic Life Support with Defibrillator Certificate or equivalents
- Recommended: Eligibility for ENGL 122 or equivalent
- Note: Current CPR certificate (Basic Life Support for Healthcare Provider with AED)

Advanced studies and manipulative skills in the specialties of dentistry. These specialties include: orthodontics, pediatrics, oral surgery, periodontics, endodontics, prosthodontics, and public health. Board approved coronal polish and community service dental health projects. CSU

DENTL-184  Clinical Experience
7 units  LR
- 36 hours lecture/288 hours laboratory per term
- Prerequisite: DENTL 174 and current American Heart Association or American Red Cross Basic Life Support with Defibrillator Certificate or equivalents
- Recommended: Eligibility for ENGL 122 or equivalent
- Note: Current CPR certificate (Basic Life Support for Healthcare Provider with AED)

Dental assisting experience with emphasis on private dental practices to include: dental office evaluation, job expectations, interviewing skills, resume writing, employment evaluations and agreements. Written and practical mock exams will be conducted in preparation for State and National Board exams upon completion of the program. Two week pre-clinical review prior to internship rotation. CSU

DENTL-190  Ultra Sonic Scaling for Orthodontic Procedures for the RDA
1 unit  LR
- 9 hours lecture/18 hours laboratory per term
- Prerequisite: DENTL 183 or equivalent

Theory and utilization of an ultrasonic scaler for the removal of excess supragingival cement from the coronal surfaces of teeth undergoing orthodontic treatment as described by the Dental Board of California. Emphasis will be placed on following standard precautionary principles and infection control protocols before, during and after the procedure. CSU

DENTL-191  Pit and Fissure Sealants for the RDA
1.5 units  SC
- 9 hours lecture by arrangement/54 hours laboratory by arrangement per term
- Prerequisite: DENTL 183 and current American Heart Association or American Red Cross Basic Life Support with Defibrillator Certificate or equivalents
- Note: Current enrollment in the DVC Registered Dental Assisting program, current TB clearance, hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR Certificate (Basic Life Support for Healthcare Provider with AED) are required

This course presents the theory, utilization, preparation and application of dental pit and fissure sealants for Registered Dental Assistants as outlined by the Committee on Dental Auxiliaries (COMDA) and the Dental Board of California (DBC). Emphasis will be placed on following standard precautionary principles and infection control protocols before, during and after procedure. CSU

DENTL-299  Student Instructional Assistant
.5-3 units  SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

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**DENTAL HYGIENE – DENHY**

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

Biological and Health Sciences Division
Dennis Smith, Dean
Science Center Building 100
925-685-1230 ext. 2359

**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.

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

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 higher in each of the required courses. Dental hygiene required program courses are only available in the day. However, required general education courses are available in the day or evening. Students who have the greatest success completing the dental hygiene program have taken the general education courses prior to application and have an overall GPA of 3.0 or higher. Certain courses may satisfy both prerequisite/major and graduation requirements; 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 term. 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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>BIOSC 120*</td>
<td>Introduction to Human Anatomy and Physiology</td>
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<td>CHEM 108*</td>
<td>Introductory Chemistry</td>
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<td>CHEM 109*</td>
<td>Introduction to Organic and Biochemistry</td>
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<tr>
<td>ENGL 122</td>
<td>Freshman English: Composition and Reading I</td>
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<tr>
<td>NUTRI 160*</td>
<td>Nutrition: Science and Applications</td>
<td>3</td>
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<tr>
<td>plus at least 4 units from:</td>
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<td>BIOSC 119*</td>
<td>Fundamentals of Microbiology</td>
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<tr>
<td>BIOSC 146*</td>
<td>Principles of Microbiology</td>
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*These courses must have been completed within the past five years.

program requirements

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<th>Course Code</th>
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<td>Introduction to Comprehensive Dental Hygiene Care</td>
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<td>Clinical Dental Hygiene</td>
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<td>DENHY 123</td>
<td>Oral Health Care Education</td>
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<td>DENHY 124</td>
<td>Fundamentals of Radiology for the Dental Hygienist</td>
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<td>DENHY 125</td>
<td>Head and Neck Anatomy, Histology, and Embryology</td>
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<td>DENHY 126</td>
<td>Dental Morphology</td>
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<td>DENHY 127</td>
<td>Infection Control: Theory, Practice and Communication</td>
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<td>DENHY 128</td>
<td>Periodontics for the Dental Hygienist</td>
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<td>DENHY 129</td>
<td>Contemporary Dental Materials for the Dental Hygienist</td>
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<td>DENHY 131</td>
<td>Local Anesthesia</td>
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<td>DENHY 133</td>
<td>Behavioral Foundation and Communication Skills</td>
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<td>DENHY 134</td>
<td>Evaluation of Scientific Research</td>
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<td>DENHY 135</td>
<td>Pharmacology for the Dental Hygienist</td>
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<td>DENHY 136</td>
<td>Dental Hygiene Care for Clients with Special Needs</td>
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<tr>
<td>DENHY 219</td>
<td>Pathology</td>
<td>2</td>
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<td>DENHY 223</td>
<td>Ethics, Jurisprudence, and Practice Management</td>
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<td>Integration of Dental Hygiene and Dentistry</td>
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<td>DENHY 225</td>
<td>Community Oral Health</td>
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<td>DENHY 226</td>
<td>Community Oral Health Service Learning</td>
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<td>DENHY 227</td>
<td>Advanced Periodontal Dental Hygiene Care</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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<td>PSYCH 122</td>
<td>Psychology in Modern Life</td>
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<td>SOCIO 120</td>
<td>Introduction to Sociology</td>
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<tr>
<td>SPCH 121</td>
<td>Persuasion and Critical Thinking</td>
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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 higher. 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 term. 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
BIOSC 120* Introduction to Human Anatomy and Physiology 5
CHEM 108* Introductory Chemistry 4
CHEM 109* Introduction to Organic and Biochemistry 4
ENGL 122 Freshman English: Composition and Reading I 3
NUTRI 160* Nutrition: Science and Applications 3

plus at least 4 units from:
BIOSC 119* Fundamentals of Microbiology 4
BIOSC 146* Principles of Microbiology 5

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

total minimum units prerequisite 23

dental hygiene program required courses   units
DENHY 101 Dental Hygiene Orientation 0.3
DENHY 120 Introduction to Dental Hygiene: Theory, Process of Care and Practice 1
DENHY 121 Introduction to Comprehensive Clinical Dental Hygiene Care 5
DENHY 122 Clinical Dental Hygiene 5
DENHY 123 Oral Health Care Education 2
DENHY 124 Fundamentals of Radiology for the Dental Hygienist 2
DENHY 125 Head and Neck Anatomy, Histology, and Embryology 4
DENHY 126 Dental Morphology 2
DENHY 127 Infection Control: Theory, Practice and Communication 2
DENHY 128 Periodontics for the Dental Hygienist 2
DENHY 129 Contemporary Dental Materials for the Dental Hygienist 1.5
DENHY 131 Local Anesthesia 1
DENHY 133 Behavioral Foundation and Communication Skills 1
DENHY 134 Evaluation of Scientific Research 1
DENHY 135 Pharmacology for the Dental Hygienist 3
DENHY 136 Dental Hygiene Care for Clients with Special Needs 1
DENHY 219 Pathology 2
DENHY 223 Ethics, Jurisprudence, and Practice Management 2
DENHY 224 Integration of Dental Hygiene and Dentistry 1.5
DENHY 225 Community Oral Health 2
DENHY 226 Community Oral Health Service Learning 1
DENHY 227 Advanced Periodontal Dental Hygiene Care 2
DENHY 230 Advanced Clinical Dental Hygiene Care I 6
DENHY 231 Advanced Clinical Dental Hygiene Care II 6.5

total minimum required units program 56.8

recommended courses:
DENLY 110 Overview of the Dental Profession 1.5
DENHY 295 RDH Examination Preparation 0.5

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DENHY-101 Dental Hygiene Orientation

.3 unit   P/NP

- 6 hours lecture/12 hours laboratory per term
- Note: Only students who are accepted into the dental hygiene program (or accepted as an alternate) will be allowed to register for this course. See the catalog or website for program information

This course is an overview of dental hygiene curriculum, dental terminology, introduction to instrumentation skills and areas of planning and time management for the dental hygiene student. CSU
DENHY-120 Introduction to Dental Hygiene:
Theory, Process of Care and Practice
1 unit LR
• 18 hours lecture per term
• Prerequisite: BIOSC 146 and DENHY 101 or equivalent
An introduction to the evolving profession of dental hygiene, the conceptual framework for dental hygiene and the dental hygiene process for the promotion of oral health and wellness. The course will focus on the dental hygiene human needs conceptual model and its application to the dental hygiene process of care. While all eight human needs related to dental hygiene care will be addressed, special focus will be given to assessment of the human needs for integrity of the skin and mucous membrane and a biologically sound and functional dentition. In addition, dental hygiene diagnosis and identification of dental hygiene interventions will be included. CSU

DENHY-121 Introduction to Comprehensive Clinical Dental Hygiene Care
5 units LR
• 54 hours lecture/108 hours laboratory per term
• Prerequisite: DENHY 101 or equivalent
• Note: TB clearance and medical exam
Introduction to the dental hygiene process, technical skills and procedures used in the clinical practice of dental hygiene. Clinical competency development will focus on client assessments, dental hygiene diagnosis, treatment planning, case presentation and implementation of instrumentation techniques for providing prevention-oriented and therapeutic dental hygiene care. Post treatment evaluation is also emphasized. CSU

DENHY-122 Clinical Dental Hygiene
5 units LR
• 48 hours lecture/126 hours laboratory per term
• Prerequisite: DENHY 101 or equivalent
• Note: Current certificate in CPR required
Application of the dental hygiene process of care guided by the human needs conceptual model to promote oral health and wellness. The course includes laboratory and clinical experiences in client assessments, problem identification (dental hygiene diagnosis), dental hygiene care planning, case presentation and implementation of dental hygiene care (preventive and therapeutic procedures, oral health education). Evaluation of dental hygiene care/oral health goals attainment is also emphasized as an essential component of the dental hygiene process. This course has an emphasis on case study development in relationship to client care needs and treatment planning. CSU

DENHY-123 Oral Health Care Education
2 units LR
• 36 hours lecture per term
• Prerequisite: DENHY 101 and NUTRI 160 or equivalent
This course is designed to introduce the principles, theory, and practice of oral hygiene care. The focus is to develop educational techniques and technical skills that can be used to assist individuals and groups in becoming integrally involved in their dental/oral care. This course will also focus on gaining information and the application of information related to oral health care to help the student make informed decisions regarding oral health promotion and disease prevention. Personal mechanical removal of bacterial plaque through the use of toothbrushes and other oral physiotherapy aids is introduced. Case studies will be used to enhance the learning experience (i.e. critical thinking and problem solving skills). CSU

DENHY-124 Fundamentals of Radiology for the Dental Hygienist
2 units LR
• 18 hours lecture/54 hours laboratory per term
• Prerequisite: DENHY 101 and CHEM 108 or equivalent
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: DENHY 101 and BIOSC 120 or equivalent
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
• Prerequisite: DENHY 101 or equivalent
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
2 units LR
• 36 hours lecture per term
• Prerequisite: DENHY 101 or equivalent
Presents epidemiology and biomedical information regarding infectious diseases, such as hepatitis, herpes and human immunodeficiency virus (HIV) and acquired
immunodeficiency syndrome (AIDS) and prevention of disease transmission. 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
- Prerequisite: **DENHY 101 or equivalent**
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
- Prerequisite: **DENHY 101 or equivalent**
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-131 Local Anesthesia**
1 unit LR
- 9 hours lecture/27 hours laboratory per term
- Prerequisite: **DENHY 101 and DENHY 127 or equivalents**
- Note: Current certificate in CPR 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-133 Behavioral Foundations and Communications Skills**
1 unit LR
- 18 hours lecture per term
- Prerequisite: **DENHY 101 or equivalent**
Introduction to principles drawn from the behavioral sciences which provide the knowledge base to guide dental hygienist-client communication. The course will include the basic components of the communication process, verbal and nonverbal communication, therapeutic and non therapeutic communication techniques, listening skills, major theories of motivation, and the interrelationship between teaching, learning, and communication. Work will focus on the modification of teaching, learning, and communication techniques appropriate for clients throughout the life span and development of abilities to interact with the many individuals and groups who make up our multicultural environment. CSU

**DENHY-134 Evaluation of Scientific Research**
1 unit LR
- 18 hours lecture per term
- Prerequisite: **DENHY 101 and ENGL 122 or equivalent**
This course is designed to familiarize the student with scientific research methodology and provide the tools necessary to critically review, evaluate and interpret scientific research results as presented in scientific and professional literature. Additionally, this course will provide insight into the review process for popular literature. CSU

**DENHY-135 Pharmacology for the Dental Hygienist**
3 units LR
- 54 hours lecture per term
- Prerequisite: **DENHY 101 and CHEM 109 or equivalents**
The study of pharmaceuticals used in medicine and dentistry. Emphasis is placed on identifying and understanding drugs by category of therapeutic use (i.e. local anesthetics, antibiotics, anti hypertensives). The underlying physiologic basis for drug action is explored. Adverse reactions including side effects and allergic responses are addressed. The study of Nitrous Oxide as a dental sedative in preparation for the use of this drug clinically is a core component of the course. CSU

**DENHY-136 Dental Hygiene Care for Clients with Special Needs**
1 unit LR
- 18 hours lecture per term
- Prerequisite: **DENHY 101 or equivalent**
This course focuses on goals, principles, and treatment modification of comprehensive dental hygiene care for clients with special needs. CSU

**DENHY-150 Topics in Dental Hygiene**
.3-4 units LR
- May be repeated three times
- Variable hours
- Prerequisite: **DENHY 101 or equivalent**
A supplemental course in dental hygiene to provide a study of current concepts and problems in dental hygiene and related subdivisions. Specific topics will be announced in the schedule of classes. CSU
DENHY-219 Pathology
2 units LR
- 36 hours lecture per term
- Prerequisite: DENHY 120 or equivalent
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: DENHY 120 or equivalent
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 practicing within the dental setting is emphasized. CSU

DENHY-224 Integration of Dental Hygiene and Dentistry
1.5 units LR
- 27 hours lecture per term
- Prerequisite: DENHY 120 or equivalent
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 complex 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. Ethical considerations and the role of effective communication and teamwork in providing comprehensive client care is emphasized throughout the course. Career satisfaction and opportunities for employment in multiple settings are discussed. CSU

DENHY-225 Community Oral Health
2 units LR
- 36 hours lecture per term
- Prerequisite: DENHY 120 and ENGL 122 or equivalents
Formerly DENHY 132
This course is the study of oral health and disease in culturally and economically diverse community and public health settings. Course emphasis is on oral health education in a variety of environments with numerous oral health needs. The process of community and public health program planning includes the assessment, development, implementation and evaluation of community based oral health programs. This course will focus on the planning of a community based oral health project to implement next semester through action research and evaluation. CSU

DENHY-226 Community Oral Health Service Learning
1 unit LR
- 18 hours lecture/18 hours laboratory per term
- Prerequisite: DENHY 120 and DENHY 225 or equivalents
This course is the study of oral health and disease in culturally and economically diverse community and public health settings. Course emphasis is on oral health education in a variety of environments with numerous oral health needs. The process of community and public health program planning includes the assessment, development, implementation and evaluation of community-based oral health programs. This course will focus on the implementation and evaluation of a planned oral health project in the community through action research. CSU

DENHY-227 Advanced Periodontal Dental Hygiene Care
2 units LR
- 36 hours lecture per term
- Prerequisite: DENHY 120 or equivalent
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: DENHY 120 and DENHY 127 or equivalents
- Note: Current CPR certificate required
This is a one semester clinical course designed to expand and develop dental hygiene skills in preventive therapy, oral prophylaxis, periodontal initial preparation, and periodontal maintenance therapy. Students will become competent in scaling and root debridement procedures, pain control and gingival curettage. Dental hygiene assessment (diagnostic) and dental hygiene care planning skills will continue to be developed. The student will also become
competent in adjunct therapeutic skills. Techniques in the use and interpretation of radiographs, infection control and office procedures will be developed. Learning experiences will be conducted with a human needs framework. Care will be client centered. The course will consist of seminar and clinical experiences. Students will develop skills by working with clients in the college clinic and in outside clinical environments. The educational focus is on the refinement of periodontal process skills in scaling and debridement, the application of advanced instrumentation principles and early self assessment skills. CSU

DENHY-231 Advanced Clinical Dental Hygiene Care II

6.5 units LR
- 18 hours lecture/306 hours laboratory per term
- Prerequisite: DENHY 120 and DENHY 127 or equivalents
- 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. CSU

DENHY-295 RDH Examination Preparation

.5 unit P/NP
- May be repeated three times
- 27 hours laboratory per term
- Prerequisite: DENHY 231 or equivalent
- Formerly DENHY 099

Advanced clinical dental hygiene experience with emphasis on preparation for the RDH Examination: including patient selection, preparation, self/peer evaluation to enhance performance on the state of California license examination.

DENHY-298 Independent Study

.5-3 units SC
- May be repeated three times
- Variable hours
- Prerequisite: Submission of acceptable education 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

DENHY-299 Student Instructional Assistant

.5-3 units SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

DENTAL LABORATORY TECHNOLOGY – DENTE

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

Biological and Health Sciences Division
Dennis Smith, Dean
Science Center Building 100
925-685-1230 ext. 2359

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.

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

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 higher and complete graduation requirements as listed in the catalog. 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.

**major requirements**

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<th>Code</th>
<th>Course Description</th>
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<td>DENTE 120</td>
<td>Orientation, Ethics, Jurisprudence, and History of Dentistry</td>
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<tr>
<td>DENTE 122</td>
<td>Introduction to Dental Materials</td>
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<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>
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<tr>
<td>DENTE 237</td>
<td>Intermediate Crown and Bridge Techniques</td>
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<td>DENTE 238</td>
<td>Advanced Crown and Bridge Techniques</td>
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<tr>
<td>DENTE 240</td>
<td>Introduction to Dental Ceramics</td>
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<td>DENTE 242</td>
<td>Dental Ceramics Substructure and Designs</td>
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<tr>
<td>DENTE 250</td>
<td>Practical Fixed and Removable Techniques</td>
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**total minimum required units** 20

**recommended courses**

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<th>Code</th>
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<td>Small Business Management</td>
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<td>COOP 170</td>
<td>Occupational Work Experience</td>
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<td>DENTL 110</td>
<td>Overview of the Dental Profession</td>
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<tr>
<td>ENGL 122</td>
<td>Freshman English: Composition and Reading I</td>
<td>3</td>
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<tr>
<td>PHYS 112</td>
<td>Fundamentals of Physical Science</td>
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</tr>
</tbody>
</table>

**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 higher. Most required courses are only available in the day. However, some recommended courses are available in the day or evening.

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**required courses**

<table>
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<tr>
<th>Code</th>
<th>Course Description</th>
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<tr>
<td>DENTE 120</td>
<td>Ethics, Jurisprudence, and History of Dentistry</td>
<td>1</td>
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<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>
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</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>
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</tr>
<tr>
<td>DENTE 238</td>
<td>Advanced Crown and Bridge Techniques</td>
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</tr>
<tr>
<td>DENTE 240</td>
<td>Introduction to Dental Ceramics</td>
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</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 minimum required units** 20

**recommended courses**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSMG 191</td>
<td>Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>COOP 170</td>
<td>Occupational Work Experience</td>
<td>1-4</td>
</tr>
<tr>
<td>DENTL 110</td>
<td>Overview of the Dental Profession</td>
<td>1.5</td>
</tr>
<tr>
<td>ENGL 122</td>
<td>Freshman English: Composition and Reading I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 112</td>
<td>Fundamentals of Physical Science</td>
<td>3</td>
</tr>
</tbody>
</table>

**DENTE-120 Ethics, Jurisprudence and History of Dentistry**

1 unit LR
- 18 hours lecture per term
- **Note:** This course to be taken in the first semester

Principles of ethics in the dental profession. History and jurisprudence of dental laboratory technology. CSU

**DENTE-122 Introduction to Dental Materials**

2 units LR
- 18 hours lecture/54 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**

1.3-4 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 classes. CSU

**DENTE-150 Topics in Dental Technology**

2 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 classes. 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 equivalents
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-299 Student Instructional Assistant
.5-3 units SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.
Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

DRAMA - DRAMA

Applied and Fine Arts Division
Michael Almaguer, Dean
Humanities Building 112 and 113
925-685-1230 ext. 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.

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

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 higher, maintain an overall GPA of 2.5 or higher, and complete graduation requirements as listed in the catalog.

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

**major requirements**

<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>

**plus 3-4 units from:**

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

**plus at least 9 units from:**

- ARCHI 130 Architectural Graphics I .................................. 3
- ART 105 Introduction to Drawing, Color, and Two-Dimensional Design ........ 3
- ART 106 Drawing and Composition ........................................ 3
- ART 108 Figure Drawing II ................................................. 3
- ARTDM 130 Introduction to Digital Audio ................................ 3
- ARTDM 149 Introduction to Digital Video ................................ 3
- ARTDM 160 3D Modeling and Animation I .................................. 3
- BCA 120 Introduction to TV Production Techniques ........................ 3
- BCA 125 Introduction to Digital Film Style Production .................. 3
- DRAMA 113 Introduction to Costume Design .................................. 2.5
- DRAMA 130 Principles of Directing ......................................... 3
- DRAMA 230 Directing Projects .............................................. 1-2
- DRAMA 270 Major Production ................................................. 1-2
- DRAMA 298 Independent Study .................................................. 0.5-3
- ENGIN 119 Introduction to Technical Drawing ............................. 3
- ENGIN 126 Computer Aided Design and Drafting - AutoCAD ................ 4
- FILM 292 Fundamentals of Film Making - Beginning ......................... 3
- MUSIC 172 Introduction to Electronic Music and MIDI ...................... 3

**total minimum required units** 27

### Certificate of achievement - Technical theater

**required courses**

<table>
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<tr>
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<tbody>
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<tr>
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</tr>
<tr>
<td>DRAMA 201</td>
<td>Technical Theater Laboratory</td>
<td>1-2</td>
</tr>
</tbody>
</table>

**plus 3-4 units from:**

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

**plus at least 9 units from:**

- ARCHI 130 Architectural Graphics I .................................. 3
- ART 105 Introduction to Drawing, Color, and Two-Dimensional Design ........ 3
- ART 106 Drawing and Composition ........................................ 3
- ART 108 Figure Drawing II ................................................. 3
- ARTDM 130 Introduction to Digital Audio ................................ 3
- ARTDM 149 Introduction to Digital Video ................................ 3
- ARTDM 160 3D Modeling and Animation I .................................. 3
- BCA 120 Introduction to TV Production Techniques ........................ 3
- BCA 125 Introduction to Digital Film Style Production .................. 3
- DRAMA 113 Introduction to Costume Design .................................. 2.5
- DRAMA 130 Principles of Directing ......................................... 3
- DRAMA 230 Directing Projects .............................................. 1-2
- DRAMA 270 Major Production ................................................. 1-2
- DRAMA 298 Independent Study .................................................. 0.5-3
- ENGIN 119 Introduction to Technical Drawing ............................. 3
- ENGIN 126 Computer Aided Design and Drafting - AutoCAD ................ 4
- FILM 292 Fundamentals of Film Making - Beginning ......................... 3
- MUSIC 172 Introduction to Electronic Music and MIDI ...................... 3

**total minimum required units** 27

### 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. 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. 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
This course focuses on acting fundamentals with an emphasis on the heightening and focusing of physical and vocal energy, and the beginning elements of scene study. Students will learn how to assess and rechannel their physical hypertension, and apply scene study techniques on stage. CSU, UC

DRAMA-123  Intermediate Principles of Acting  
3 units  SC  
• 54 hours lecture per term  
• Recommended: DRAMA 122 or equivalent
This course continues to develop the heightened physical and vocal energies needed for stage, and introduces more complex elements in scene study. Students continue their work in addressing instrumental hypertension, and learn specific ways to apply the use of the imagination to the preparation and performance of a scene on stage. CSU, UC

DRAMA-124  Advanced Principles of Acting  
6 units  SC  
• 108 hours lecture per term  
• Prerequisite: DRAMA 122 and DRAMA 123 or equivalents; 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 equivalents
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 equivalents; 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: Pre-Greek to 17th Century  
3 units  SC  
• 54 hours lecture per term  
• Recommended: Eligibility for ENGL 122 or equivalent
This course is an historical survey of dramatic art from the period of pre-Greek civilization to the Elizabethan Renaissance. Students will examine the various influences that led to the development and evolution of theater in various cultures and time periods. CSU, UC

DRAMA-141  History of the Theater: 17th Century to Present  
3 units  SC  
• 54 hours lecture per term  
• Recommended: Eligibility for ENGL 122 or equivalent
This course is an historical survey of dramatic art from the period of the Elizabethan Renaissance to the present. Students will examine the various influences that led to the development and evolution of theater in various cultures and time periods. 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 a young audience. The production will tour local schools. Each term new literature and productions are focused upon. 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 classes. CSU

DRAMA-157 Topics in Technical Theater
1-3 units SC
• May be repeated three times
• Variable hours
A supplemental course in technical theater to provide a study of current concepts, problems and related subdivisions. Specific topics will be announced in the schedule of classes. CSU

DRAMA-170 Introduction to Musical Theater
4 units SC
• 72 hours lecture per term
• Recommended: MUSIC 170 or equivalent
This course develops audition and performance skills combining singing, dancing, and acting in the presentation of scenes, as well as the rehearsal and performance of dance routines from a variety of musicals. A survey of the history and development of musical theater is included. CSU, UC

DRAMA-180 Literature of World Drama: Pre-Greek to 17th Century
3 units SC
• 54 hours lecture per term
This course examines great works of world dramatic literature from the periods of pre-Greek civilization to the Elizabethan Renaissance. Through reading, writing, scene work, and viewing stage and film productions, students will gain an understanding of how the transformation of great dramatic literature from text to performance had a profound influence on past civilizations, and how it continues to influence us today. CSU, UC

DRAMA-181 Literature of World Drama: 17th Century to Present
3 units SC
• 54 hours lecture per term
This course examines works of great dramatic literature from the period of the Elizabethan Renaissance to the present day. Through reading, writing, scene work, and viewing stage and film productions, students will gain an understanding of how the transformation of great dramatic literature from text to performance had a profound influence on past civilizations, and how it continues to influence us today. 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 or equivalent (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
Drama

Performance; emphasis in the director-actor relationship and effective staging. May include original (not previously published) material. CSU, UC (credit limits may apply to UC - see counselor)

**DRAMA-260 Acting in Student Directed Projects**
1-2 units SC
- May be repeated three times
- Variable hours
- Recommended: Audition or equivalent

This is an open entry open exit class, where students receive practical experience in rehearsal and performance in student-directed scenes through performance under rehearsal conditions; rehearsal and performance in student directed one-acts in varied theater styles for public performance; rehearsal and performance in a short musical role; may be faculty or student directed. All projects culminate in public performance. CSU, UC (credit limits may apply to UC - see counselor)

**DRAMA-270 Major Production**
1-2 units SC
- May be repeated three times
- Variable hours
- Prerequisite: Audition and interview

This is an open entry, open exit class, where students participate in a faculty-directed, sustained, musical or non-musical role, with emphasis in rehearsal and performance. Involvement could include script analysis, coordination of voice, movement, costume, makeup, performance style, and technical theater. All projects culminate in public performance. CSU, UC (credit limits may apply to UC - see counselor)

**DRAMA-298 Independent Study**
.5-3 units SC
- May be repeated three times
- Variable hours
- Prerequisite: Submission of acceptable educational contract to department and Instruction Office; topics must extend study beyond courses offered.

An opportunity that provides advanced drama students with special interests to study selected topics under the direction of the faculty. CSU

**DRAMA-299 Student Instructional Assistant**
.5-3 units SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

**EARLY CHILDHOOD EDUCATION – ECE**

Social Sciences Division
Lyn Krause, Dean
Faculty Office 134
925-685-1230 ext. 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.

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

Associate in science degree
Early childhood education

Certificates of achievement
Early childhood education - Basic
Early childhood education - Family daycare provider/foster care provider/in-home childcare provider
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 higher and complete graduation requirements as listed in the catalog. Attending classes in the day, the evening or both can complete degree requirements.

major requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<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 126 Health, Safety and Nutrition for the Young Child</td>
<td>3</td>
</tr>
<tr>
<td>ECE 128 Advanced Curriculum Development in ECE</td>
<td>3</td>
</tr>
<tr>
<td>ECE 130 Child, Family and Community</td>
<td>3</td>
</tr>
<tr>
<td>ECE 144 Diversity in Early Childhood Education</td>
<td>3</td>
</tr>
<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>
</tbody>
</table>

total minimum required units 26

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 adds to the minimum requirements for the California State Department of Social Services, Community Care Licensing, Title 22 requirements for a fully qualified teacher.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or higher. Attending classes in the day, the evening or both can complete certificate requirements.

required courses

<table>
<thead>
<tr>
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<tr>
<td>ECE 124 Child Development and Psychology</td>
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<tr>
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<tr>
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<td>3</td>
</tr>
<tr>
<td>ECE 128 Advanced Curriculum Development in ECE</td>
<td>3</td>
</tr>
<tr>
<td>ECE 130 Child, Family and Community</td>
<td>3</td>
</tr>
<tr>
<td>ECE 144 Diversity in Early Childhood Education</td>
<td>3</td>
</tr>
<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>
</tbody>
</table>

total minimum required units 20

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 higher. Attending classes in the day, the evening or both can complete certificate requirements.

required courses

<table>
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<tr>
<th>Course</th>
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<tr>
<td>ECE 124 Child Development and Psychology</td>
<td>3</td>
</tr>
<tr>
<td>ECE 126 Health, Safety and Nutrition for the Young Child</td>
<td>3</td>
</tr>
<tr>
<td>ECE 129 Dealing with Difficult and Aggressive Young Children</td>
<td>3</td>
</tr>
<tr>
<td>ECE 130 Child, Family and Community</td>
<td>3</td>
</tr>
<tr>
<td>ECE 134* Topics in Family Communication and Interaction</td>
<td>3</td>
</tr>
<tr>
<td>plus at least 3 units from:</td>
<td></td>
</tr>
<tr>
<td>ECE 125 Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 128 Advanced Curriculum Development in ECE</td>
<td>3</td>
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<tr>
<td>ECE 144 Diversity in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 220 Programs for the School Age Child</td>
<td>3</td>
</tr>
<tr>
<td>ECE 230 Infant and Toddler Care</td>
<td>3</td>
</tr>
<tr>
<td>ECE 269 Introduction to Special Needs in Young Children</td>
<td>3</td>
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<tr>
<td>plus 2 units from:</td>
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<tr>
<td>ECE 245 Introduction to Family Child Care</td>
<td>1</td>
</tr>
<tr>
<td>ECE 246 Introduction to Foster Parenting</td>
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<tr>
<td>ECE 247 Issues of Foster Parenting</td>
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</tbody>
</table>

total minimum required units 20

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.
Early childhood education

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 higher. Attending classes in the day, the evening or both can complete certificate requirements.

**required courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 124</td>
<td>Child Development and Psychology</td>
<td>3</td>
</tr>
<tr>
<td>ECE 125</td>
<td>Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 126</td>
<td>Health, Safety and Nutrition for the Young Child</td>
<td>3</td>
</tr>
<tr>
<td>ECE 128</td>
<td>Advanced Curriculum Development in ECE</td>
<td>3</td>
</tr>
<tr>
<td>ECE 130</td>
<td>Child, Family and Community</td>
<td>3</td>
</tr>
<tr>
<td>ECE 144</td>
<td>Diversity in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 249</td>
<td>Introduction to ECE Theory and Practice</td>
<td>4</td>
</tr>
<tr>
<td>ECE 250</td>
<td>ECE Theory and Practice</td>
<td>4</td>
</tr>
<tr>
<td>ECE 253</td>
<td>Adult Supervision in Early Childhood Classrooms</td>
<td>2-3</td>
</tr>
</tbody>
</table>

**plus at least six units in any one of these areas of concentration:**

**creative expression**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 237*</td>
<td>Topics in Current Theory, Research and Implementation</td>
<td>0.5-3</td>
</tr>
<tr>
<td>ECE 242</td>
<td>Music for the Young Child</td>
<td>2</td>
</tr>
<tr>
<td>ECE 243</td>
<td>Creative Art for the Young Child</td>
<td>1</td>
</tr>
<tr>
<td>or one elective from ART 155, 160; or PEDAN 129, 130, 138, 142; or DRAMA 150; or MUSIC 101, 102, 112, 120, 150, 151, 171</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**family day care/foster care provider**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 245</td>
<td>Introduction to Family Child Care</td>
<td>1</td>
</tr>
<tr>
<td>ECE 246</td>
<td>Introduction to Foster Parenting</td>
<td>1.5</td>
</tr>
<tr>
<td>ECE 247</td>
<td>Issues of Foster Parenting</td>
<td>1</td>
</tr>
</tbody>
</table>

**infants and toddlers**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 230</td>
<td>Infant and Toddler Care</td>
<td>3</td>
</tr>
<tr>
<td>ECE 231</td>
<td>Infants and Toddlers: Issues and Applications</td>
<td>3</td>
</tr>
</tbody>
</table>

**language and literature**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 177</td>
<td>Children's Literature</td>
<td>3</td>
</tr>
<tr>
<td>ECE 237*</td>
<td>Topics in Current Theory, Research and Implementation</td>
<td>0.5-3</td>
</tr>
<tr>
<td>ECE 240</td>
<td>Language, Literacy, and Literature for the Young Child</td>
<td>3</td>
</tr>
<tr>
<td>L 111</td>
<td>Storytelling</td>
<td>2</td>
</tr>
</tbody>
</table>

**science and math**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 237*</td>
<td>Topics in Current Theory, Research and Implementation</td>
<td>0.5-3</td>
</tr>
<tr>
<td>ECE 241</td>
<td>Science and Mathematics for Early Childhood Education</td>
<td>3</td>
</tr>
</tbody>
</table>

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

**sign language**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIGN 280</td>
<td>American Sign Language (ASL) I</td>
<td>3</td>
</tr>
<tr>
<td>SIGN 281</td>
<td>American Sign Language (ASL) II</td>
<td>3</td>
</tr>
<tr>
<td>SIGN 282</td>
<td>American Sign Language (ASL) III</td>
<td>3</td>
</tr>
</tbody>
</table>

**special needs**

<table>
<thead>
<tr>
<th>Course 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 263</td>
<td>The Special Needs Child - Speech, Language and Hearing</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>

Or any sign Language course:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIGN 280, 281, or 282</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**plus at least 16 units from:**

**general education courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 237*</td>
<td>Topics in Current Theory, Research and Implementation</td>
<td>0.5-3</td>
</tr>
</tbody>
</table>

(At least one course each from humanities, social science, science or math, and English)

**total minimum required units** 50

*Topics for ECE 237 vary. Please contact the Early Childhood Education Department to verify if a ECE 237 course meets the requirements for a particular area of specialization.

**Certificate of achievement - Early childhood education - Site supervisor**

This certificate meets the education requirements for the Site Supervisor level of the Child Development Permit Matrix issued by the State of California Commission on Teacher Credentialing. After meeting additional experience requirements, graduates are qualified to apply for a Child Development Permit, which is required to work in federal and state funded programs for children aged 0-5.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or higher. Attending classes in the day, the evening or both can complete certificate requirements.

**required courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 251</td>
<td>Administration and Supervision of Early Childhood Education Programs</td>
<td>3</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>
</tbody>
</table>

**total minimum required units** 59

**Certificate of achievement - 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...
Early childhood education

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 higher. 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</td>
<td>3</td>
</tr>
<tr>
<td>ECE 125</td>
<td>3</td>
</tr>
<tr>
<td>ECE 126</td>
<td>3</td>
</tr>
<tr>
<td>ECE 128</td>
<td>3</td>
</tr>
<tr>
<td>ECE 130</td>
<td>3</td>
</tr>
<tr>
<td>ECE 144</td>
<td>3</td>
</tr>
<tr>
<td>ECE 249</td>
<td>4</td>
</tr>
<tr>
<td>ECE 250</td>
<td>4</td>
</tr>
</tbody>
</table>

plus at least 16 units from:

<table>
<thead>
<tr>
<th>general education courses</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td>(At least one course each from humanities, social science, science or math, and English)</td>
<td></td>
</tr>
</tbody>
</table>

**total minimum required units** 42

**Certificate of accomplishment - Early childhood education - Associate teacher**

This certificate meets the education requirements for the Associate Teacher level of the Child Development Permit Matrix issued by the State of California Commission on Teacher Credentialing and Community Care Licensing. Title 22 requirements for a fully qualified teacher. 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 accomplishment, students must complete each course used to meet a certificate requirement with a “C” grade or higher. 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</td>
<td>3</td>
</tr>
<tr>
<td>ECE 125</td>
<td>3</td>
</tr>
<tr>
<td>ECE 126</td>
<td>3</td>
</tr>
<tr>
<td>ECE 128</td>
<td>3</td>
</tr>
<tr>
<td>ECE 130</td>
<td>3</td>
</tr>
<tr>
<td>ECE 249</td>
<td>4</td>
</tr>
<tr>
<td>ECE 250</td>
<td>4</td>
</tr>
</tbody>
</table>

**total minimum required units** 12

**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 higher. 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</td>
<td>1.5</td>
</tr>
<tr>
<td>ECE 248</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**
  - ECE 266 Meeting the Developmental Needs of Children at-Risk 0-5 Years 1
  - ECE 129* Dealing with Difficult and Aggressive Young Children 3
  - ECE 137* Issues of Separation and Loss with Children and Families 3
  - ECE 150 Topics in Child Development 1-3
  - ECE 156 Topics for Caregivers 0-5 Years 0.3-4
  - ECE 265* 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

- **providing care for children aged 6-11 years**
  - ECE 267 Meeting the Developmental Needs of Children at-Risk 6-11 Years 1
  - ECE 129* Dealing with Difficult and Aggressive Young Children 3
  - ECE 137* Issues of Separation and Loss with Children and Families 3
  - ECE 157 Topics for Caregivers of Children in Out-Of-Home Placement I 0.3-4
  - ECE 220 Programs for the School Age Child 3
  - ECE 247 Issues of Foster Parenting 1
  - ECE 283* 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

- **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

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

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 060</td>
<td>1</td>
</tr>
<tr>
<td>ECE 061</td>
<td>1</td>
</tr>
<tr>
<td>ECE 158</td>
<td>1</td>
</tr>
<tr>
<td>ECE 247</td>
<td>0.3-4</td>
</tr>
<tr>
<td>ECE 268</td>
<td>1</td>
</tr>
</tbody>
</table>

**or students may select one of the following courses:**

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

**total minimum required units** 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-123  Introduction to Curriculum in ECE
3 units  LR  
- 54 hours lecture per term  
- Prerequisite: ECE 124 or equivalent (may be taken concurrently)  
- Recommended: Eligibility for ENGL 122 or equivalent  
- Note: Meets the Department of Social Services licensing requirement for DSS III Program and Curriculum Development
This course will prepare students to plan developmentally appropriate curriculum for early childhood education age children (0-8 years). It will address the novice student/teacher as well as those who have experience as students/teachers. CSU

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. 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 previously)  
- 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 young 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 programs 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 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-128  Advanced Curriculum Development in ECE
3 units  SC  
- 54 hours lecture per term  
- Co-requisite: ECE 124 or equivalent (may be taken previously)  
- Recommended: Eligibility for ENGL 122 or equivalent  
- Note: Meets the State Department of Social Services licensing requirement for DSS III, Program and Curriculum Development
This course will focus on new trends, approaches and techniques in early childhood education curriculum. It will acquaint students with various curriculum approaches and give them practice in applying such approaches in an ECE program. CSU
ECE-129   Dealing with Difficult and Aggressive Young Children
3 units   SC
• 54 hours lecture per term
• Co-requisite: ECE 124 or equivalent (may be taken previously)
• Recommended: Eligibility for ENGL 122 or equivalent
• Note: Meets the State Department of Social Services licensing requirement for DSS III Program and Curriculum Development
This course is designed to examine the reasons for children’s difficult and aggressive behaviors. Strategies for prevention and intervention in the classroom and home will be studied. CSU

ECE-130   Child, Family, and Community
3 units   SC
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent
• Note: Meets the State Department of Social Services licensing requirements for DSS II, Child, Family, and Community
An introduction to the issues involved in early childhood education related to the entire learning environment of a child with emphasis on the family and community. Examination of the impact on a child of the variety of family systems including ethnic and subcultural variations. Study of community and society as it impacts the family and the child with an introduction to community resources available to support contemporary family life. CSU

ECE-134   Topics in Family Communication and Interaction
3-4 units   SC
• May be repeated three times
• Variable hours
• Note: Meets the State Department of Social Services licensing requirement for DSS III Program and Curriculum Development, if taken for 3 units
A supplemental course in family communication and interaction to examine establishing a home and family, raising children in positive and effective ways and adjusting to parents’ role such as single parents, working parents, step-parents and foster child care parents. Specific topics will be announced in the schedule of classes. CSU

ECE-137   Issues of Separation and Loss with Children and Families
3 units   SC
• 54 hours lecture per term
• Recommended: ECE 124 and eligibility for ENGL 122 or equivalents
Review of major theories related to separations, loss, and their implications in working with young children. Cultural customs are explored along with resources that are available for teaching children about separation and loss. CSU

ECE-140   Creative Activities for Young Children
3 units   SC
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent
• Note: Meets the Department of the Social Services licensing for DSS III Program and Curriculum Development
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

ECE-144   Diversity in Early Childhood Education
3 units   SC
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent
• Note: Meets the State Department of Social Services licensing requirements for DSS III, Program and Curriculum Development
This course examines contributions of biases regarding race, gender, culture, disability, class and age in order to prepare students to work within diverse classrooms and communities. Through this examination students gain knowledge of experiences and perspectives other than their own, therefore, increasing tolerance, respect for, and interaction among people from diverse populations. CSU

ECE-150   Topics in Child 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 or approved off-campus mentor site from 3 to 6 hours per week is required for 2 or 3 units. One unit: lecture only. Two units: lecture plus three laboratory hours per week. Three units: lecture plus six laboratory hours per week. Required of parents whose children are enrolled in Developmental Children’s Center.
A supplemental course in child development to provide a study of current concepts and problems in child development related subdivisions. Specific topics will be announced in the schedule of classes. CSU
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 or approved off-campus mentor site 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 classes. 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 or approved off-campus mentor site 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 classes. 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 or approved off-campus mentor site 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 classes. 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 or approved off-campus mentor site 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 classes. 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 or approved off-campus mentor site 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 classes. 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 classes. 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 classes. 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 classes. CSU

ECE-220  Programs for the School Age Child
3 units SC
• 54 hours lecture per term
• Prerequisite: ECE 124 or equivalent
• 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
Review of the developmental issues of infants and toddlers. Study of the basic components of developmentally appropriate infant-toddler curriculum including development, care-giving environments, care-giver response and collaboration with families. Observations of infants and toddlers, learning environments, and care-giving strategies will be included. CSU

ECE-231  Infant and Toddlers: Issues and Application
3 units SC
• 54 hours lecture per term
• Prerequisite: ECE 230 or equivalent
• Recommended: Eligibility for ENGL 122 or equivalent
This course is designed to review current infant and toddler child development issues and to discuss current developmental topics that impact infant/toddler care. CSU

ECE-237  Current Topics in Early Childhood Education
.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 classes. 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 or equivalent
• 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
• Recommended: Eligibility for ENGL 122 or equivalent

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
• Recommended: Eligibility for ENGL 122 or equivalent

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
• Recommended: Eligibility for ENGL 122 or equivalent

Designed for both new and experienced foster parents. Addresses in considerable depth some of the most basic issues faced by foster parents. Offers clarification of these issues and options for dealing with them. CSU

ECE-248 Child, Family and the Foster/Kin Care Community
1 unit P/NP
• 18 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent

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
• Co-requisite: ECE 125 or equivalent (may be taken previously)
• Recommended: Eligibility for ENGL 122 or equivalent
• Note: TB clearance required for students to participate in lab work at DVC Children’s Center or approved mentor site. Meets the State Department of Social Services licensing requirement for DSS III, Program and Curriculum Development.

An introductory supervised practicum study of developmentally appropriate early childhood teaching competencies. Students will utilize practical classroom experiences to make connections between theory and practice, develop professional behaviors, and build a comprehensive understanding of children and families. Child centered, play-oriented approaches to teaching, learning, and assessment; and knowledge of curriculum content areas will be emphasized as student teachers design, implement and evaluate experiences that promote positive development and learning for all young children. CSU

ECE-250 Early Childhood Education Theory and Practice
4 units SC
• 36 hours lecture/108 hours laboratory per term
• Prerequisite: ECE 124 and ECE 125 or equivalents
• Co-requisite: ECE 249 or equivalent (may be taken previously)
• 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.

An advanced supervised practicum study of developmentally appropriate practices in an early childhood education laboratory setting. Focus is on reflective teaching and developing in-depth curriculum projects based on ongoing observations of children. Topics include planning and implementing curriculum, creating environments, communication skills, and professionalism in the field. CSU
ECE-251 Administration and Supervision of Early Childhood Education Programs
3 units SC
- 54 hours lecture per term
- Prerequisite: ECE 124 and ECE 125, or equivalents
- 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 units SC
- 36 hours lecture per term
- Recommended: ECE 124, 125, 130 and 250 or equivalents; eligibility for ENGL 122 or equivalent

This course is a study of the methods and principles of supervising student teachers, assistant teachers, parents and volunteers in early childhood education/child 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 equivalents

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 and eligibility for ENGL 122 or equivalents

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 and eligibility for ENGL 122 or equivalents

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

ECE-299  Student Instructional Assistant
.5-3 units SC

• May be repeated three times
• Variable hours
• Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

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 120 or MATH 120SP or equivalent
• Recommended: Eligibility for ENGL 122 or equivalent

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. 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 120 or MATH 120SP or equivalent
• Recommended: Eligibility for ENGL 122 or equivalent

Microeconomics focuses on the study of choices made by economic agents, namely, consumers, resource owners, firms, and government, and how these decisions affect the market for a particular good or service. Typical topics include a detailed study of the market mechanism, the elasticity properties of the demand and supply curves, how individuals make decisions about consumption and labor supply, how firms make decisions about how and how much to produce, and why some goods do not lend themselves to private production. The course also examines types of market structure and current economic issues. CSU, UC (credit limits may apply to UC - see counselor)

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-298  Independent Study
.5-3 units SC

• May be repeated three times
• Variable hours
• Note: Submission of acceptable 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
ECON-299  Student Instructional Assistant
.5-3 units SC
• May be repeated three times
• Variable hours
• Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

EDUC-120  Teaching as a Profession
3 units LR
• 45 hours lecture/27 hours laboratory by arrangement per term
• Note: Credit by examination option available

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

EDUCATION – EDUC
Social Sciences Division
Lyn Krause, Dean
Faculty Office 134
925-685-1230 ext. 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.

ELECTRICAL/ELECTRONICS TECHNOLOGY – ELECT/ELTRN
Physical Sciences and Engineering Division
Dennis Smith, Dean
Physical Science Building 263
925-685-1230 ext. 2359

Possible career opportunities
The types of jobs and careers involving electrical/electronics include: electrical, medical, industrial, and commercial electronical programmable logic controller systems; computers; consumer products; radio and television; instrumentation; communications; automotive and others.

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

Associate in science degree
Electrical/electronics technology

Certificate of achievement
Electrical/electronics technology

Associate in science degree - Electrical/Electronics Technology
This program prepares students for jobs installing, repairing, maintaining and servicing electrical and electronics equipment. Electrical/electronics jobs are found in the fields of electrical, medical, industrial, commercial systems, programmable logic controller systems, automotive, communications and others. The following courses are part of the Electricians Trainee Program and approved by the
Division of Apprenticeship Standards: Electricity 120, 121, 271, 266, 267, Electronics 102B and CNT 103.

Selected courses may meet some of the lower division requirement 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 an associate in science with a major in electricity/electronics, students must complete each course used to meet a major requirement with a “C” or higher, maintain an overall GPA of 2.5 or higher in the coursework required for the major and complete graduation requirements as listed in the catalog. Some courses may satisfy both major and other graduation requirements; however, the units are only counted once.

**major requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ELECT 120: Direct Current Circuits</td>
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<tr>
<td>ELECT 121: Alternating Current Circuits</td>
<td>4</td>
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<tr>
<td>ELECT 130: Motors and Motor Controllers</td>
<td>4</td>
</tr>
<tr>
<td>ELECT 266: Electrical Codes: Articles 90-398</td>
<td>3</td>
</tr>
<tr>
<td>ELECT 267: Electrical Codes: Articles 400-830</td>
<td>3</td>
</tr>
<tr>
<td>ELECT 271: Programmable Logic Controllers</td>
<td>4</td>
</tr>
<tr>
<td>ELTRN 102B: Linear Circuits</td>
<td>4</td>
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</tbody>
</table>

**total minimum required units** 26

**optional electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>ELTRN 107: Introduction to Robotics</td>
<td>1</td>
</tr>
<tr>
<td>COMTC 110: Introduction to Computer Hardware/Software</td>
<td>4</td>
</tr>
<tr>
<td>ENSYS 130: Photovoltaic Systems Design and Installation</td>
<td>2</td>
</tr>
</tbody>
</table>

**Certificate of achievement - Electrical/ Electronics technology**

This program prepares students for jobs installing, repairing, maintaining and servicing electrical and electronics equipment. Electrical/electronics jobs are found in the fields of electrical, medical, industrial, commercial systems, programmable logic controller systems, automotive, communications and others. The following courses are part of the Electricians Trainee Program and approved by the Division of Apprenticeship Standards: Electricity 120, 121, 271, 266, 267, Electronics 102B and CNT 103.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or higher and maintain an overall GPA of 2.5 or higher in the coursework required for the certificate.

**required courses**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ELECT 120: DC Circuits</td>
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<tr>
<td>ELECT 121: AC Circuits</td>
<td>4</td>
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<tr>
<td>ELECT 130: Motors and Motor Controllers</td>
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<td>ELECT 271: Programmable Logic Controllers</td>
<td>4</td>
</tr>
<tr>
<td>ELTRN 102B: Linear Circuits</td>
<td>4</td>
</tr>
</tbody>
</table>

**total minimum required units** 26

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**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

A supplemental course in electricity designed to provide a study of the current concepts and problems in electricity. Specific topics will be announced in the schedule of classes. 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.

ELECT-271 Programmable Logic Controllers
4 units LR
• 54 hours lecture/54 hours laboratory per term
• Recommended: ELECT 120 or equivalent
• Formerly ELTRN 271

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

ELECT-299 Student Instructional Assistant
.5-3 units SC
• May be repeated three times
• Variable hours
• Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

ELTRN-102B Linear Circuits
4 units LR
• 54 hours lecture/54 hours laboratory per term
• Recommended: ELECT 121 or equivalent

A study of operational amplifiers, timers, phase-locked loops, and other active devices. Includes analysis and design of basic circuits such as active filters and analog communication circuits. Also includes related laboratory experience. CSU

ELTRN-107 Introduction to Robotics
1 unit SC
• May be repeated once
• 27 hours lecture/27 hours laboratory per term
• Note: Can be repeated when hardware/software changes

The course will introduce to students 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
• Recommended: ELTRN 120 or equivalent

Basic direct current (DC) theory covering OHM’s Law, series circuits, parallel circuits, series-parallel circuits, basic residential wiring and ladder logic. Also includes related 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
• Recommended: ELTRN 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 3-phase circuits, computer-simulated circuits, and related laboratory experience. 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 classes. CSU

ELTRN-299 Student Instructional Assistant
.5-3 units SC
• May be repeated three times
• Variable hours
• Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU
**ENERGY SYSTEMS – ENSYS**

Formerly AET- Alternative Energy Technology

Physical Sciences and Engineering Division  
Dennis Smith, Dean  
Physical Sciences Building 261  
925-685-1230 ext. 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.

### Program level student learning outcomes

A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: [www.dvc.edu/slo](http://www.dvc.edu/slo) for the most current information.

### Associate in science degree

**Energy systems**

**Specializations:**
- Photovoltaic
- Solar thermal

### Certificates of achievement

**Energy systems - Photovoltaic**

**Energy Systems - Solar thermal**

### Associate in science degree - Energy systems

This program prepares students for jobs installing, designing, servicing and maintenance of maintaining solar energy systems. Students can choose either of two areas of specialization.

Students who focus on photovoltaic systems will be able to work with residential, commercial, and industrial-size solar thermal systems. Solar thermal systems include domestic water heating, radiant floor heating, swimming pool, and spa heating systems. Solar air heating and cooling systems are currently under development, and will be included once established. Many of the skills learned in the solar thermal courses relate to photovoltaic systems as well. The following solar thermal required courses are part of the electricians' trainee program and are approved by the Division of Apprenticeship Standards: Electricity 120 and 266.

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 an associate in science degree, students must complete each course used to meet a major requirement with a “C” grade or higher, maintain an overall GPA of 2.5 or higher in the coursework required for the major and complete all graduation requirements as listed in the catalog.

Students are limited to one associate in science degree regardless of the number of specializations completed. Multiple certificates may be awarded.

### Major requirements

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>CONST 110</td>
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<td>CONST 114</td>
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<tr>
<td>CONST 135</td>
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<td>ELECT 120</td>
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<tr>
<td>ELECT 266</td>
<td>3</td>
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*Choose 9-11 units from one of the following two specialty areas:

#### Photovoltaic

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ELECT 121</td>
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<td>ELECT 267</td>
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<td>ENSYS 130</td>
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<td>ENSYS 230</td>
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#### Solar thermal

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<td>CONST 191</td>
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<td>ENSYS 140</td>
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**Recommended course**

<table>
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<th>Course</th>
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<tbody>
<tr>
<td>MATH 120</td>
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</table>
Certificate of achievement - Energy systems - Photovoltaic
This program prepares students for jobs installing, designing, servicing and maintaining photovoltaic systems. Students from this program will be able to work with residential, commercial and industrial size photovoltaic systems. Many of the skills learned in these courses relate to solar thermal systems as well. The following courses are part of the Electricians Trainee Program and approved by the Division of Apprenticeship Standards: Electricity 120, 121, 266, 267.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or higher and maintain an overall GPA of 2.5 or higher in the coursework required for the certificate.

<table>
<thead>
<tr>
<th>major requirements</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONST 110 Occupational Safety</td>
<td>2</td>
</tr>
<tr>
<td>CONST 114 Blueprint Reading</td>
<td>3</td>
</tr>
<tr>
<td>CONST 135 Construction Processes (Residential)</td>
<td>4</td>
</tr>
<tr>
<td>ELECT 120 Direct Current Circuits</td>
<td>4</td>
</tr>
<tr>
<td>ELECT 121 Alternating Current Circuits</td>
<td>4</td>
</tr>
<tr>
<td>ELECT 266 Electrical Codes: Articles 90-398</td>
<td>3</td>
</tr>
<tr>
<td>ELECT 267 Electrical Codes: Articles 400-830</td>
<td>3</td>
</tr>
<tr>
<td>ENSYS 130 Photovoltaic Systems Design and Installation</td>
<td>2</td>
</tr>
<tr>
<td>ENSYS 230 Advanced Photovoltaic Systems</td>
<td>2</td>
</tr>
</tbody>
</table>

| total minimum required units                 | 27    |

Certificate of achievement - Energy systems - Solar thermal
This program prepares students for careers installing, designing, servicing, and maintaining solar thermal systems. Successful completers of this program will be able to work with residential, commercial, and industrial-size solar thermal systems. Solar thermal systems include domestic water heating, radiant floor heating, swimming pool, and spa heating systems. Solar air heating and cooling systems are currently under development, and will be included once established.

Many of the skills learned in these courses relate to solar photovoltaic systems as well. The following courses are part of the electricians’ trainee program and are approved by the Division of Apprenticeship Standards: Electricity 120 and 266.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or higher and maintain an overall GPA of 2.5 or higher in the coursework required for the certificate.

<table>
<thead>
<tr>
<th>required courses</th>
<th>units</th>
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</thead>
<tbody>
<tr>
<td>CONST 110 Occupational Safety</td>
<td>2</td>
</tr>
<tr>
<td>CONST 114 Blueprint Reading</td>
<td>3</td>
</tr>
<tr>
<td>CONST 135 Construction Processes (Residential)</td>
<td>4</td>
</tr>
<tr>
<td>CONST 191 Plumbing Code Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>ELECT 120 Direct Current Circuits</td>
<td>3</td>
</tr>
</tbody>
</table>

| ELECT 266 Electrical Codes: Articles 90-398 | 3     |
| ENSYS 140 Solar Thermal Systems            | 4     |
| ENSYS 260 Photovoltaic and Solar Thermal   | 2     |
| Installation Techniques                    |       |

| total units required                      | 25    |

| MATH 120 Intermediate Algebra            | 4     |

<table>
<thead>
<tr>
<th>ENSYS-120 Introduction to Alternate Energy Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 units SC</td>
</tr>
<tr>
<td>• 36 hours lecture/18 hours laboratory per term</td>
</tr>
<tr>
<td>• Formerly AET 120</td>
</tr>
</tbody>
</table>

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 hydroelectric 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

<table>
<thead>
<tr>
<th>ENSYS-130 Photovoltaic Systems Design and Installation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 units SC</td>
</tr>
<tr>
<td>• May be repeated once</td>
</tr>
<tr>
<td>• 36 hours lecture/18 hours laboratory per term</td>
</tr>
<tr>
<td>• Formerly AET 130</td>
</tr>
</tbody>
</table>

Students will learn how to do solar site evaluations, electrical load calculations, solar system size calculations, and installation techniques for grid-tie and off-the-grid photovoltaic systems. Students will learn how to design and install their own solar system and or obtain skills for employment. This course is approved by the North American Board of Certified Energy Practitioners (NABCEP) and the students can take the optional Photovoltaic Systems Entry Level certification exam as part of the course. CSU

<table>
<thead>
<tr>
<th>ENSYS-140 Solar Thermal Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 units LR</td>
</tr>
<tr>
<td>• 54 hours lecture/54 hours laboratory per term</td>
</tr>
<tr>
<td>• Note: The lab part of this course will include working with hand and power tools and metal soldering. This course is equivalent to ENSYS 141 and ENSYS 145 combined.</td>
</tr>
<tr>
<td>• Formerly AET 140</td>
</tr>
</tbody>
</table>

This course will cover the theory and application of solar thermal systems. This includes solar water heating for domestic use, radiant floor heating, swimming pools and spas. Additional topics include solar air heating and applications of power concentration. CSU
**ENSYS-141 Introduction to Solar Thermal Systems**
2 units SC
- 27 hours lecture/27 hours laboratory per term
- Note: Laboratory activities include working with hand and power tools and being on elevated structures
This course will cover the theory and applications of solar thermal systems including hot water heating, radiant floor heating, swimming pools and spas. Laboratory activities include building drain-back, drain-down and ICS solar systems. CSU

**ENSYS-145 Advanced Solar Thermal Systems**
2 units LR
- 27 hours lecture/27 hours laboratory per term
- Note: Laboratory activities include working with hand and power tools and being on elevated structures
This course will cover the design, installation and servicing of solar thermal systems for residential and commercial applications. CSU

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

**ENSYS-230 Advanced Photovoltaic Systems**
2 units LR
- May be repeated once
- 27 hours lecture/27 hours laboratory per term
- Recommended: ENSYS 130 or equivalent and ELECT 122 or equivalent
- Formerly AET 230
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

**ENSYS-260 Solar Photovoltaic and Thermal Installation Techniques**
2 units LR
- 27 hours lecture/27 hours laboratory per term
- Prerequisite: ENSYS 140 or equivalent
- Note: This course will include activities working with high voltages and working on elevated surfaces. Class activities include climbing ladders, lifting up to 50 pounds and working in crawl spaces and tight areas.
- Formerly AET 260
This course will cover the techniques, tools, materials used in the installation of solar photovoltaic and solar thermal systems. This course will also cover the OSHA safety requirements for ladder, roof, fall-protection systems, scissor lifts and forklifts. CSU

**ENSYS-299 Student Instructional Assistant**
.5-3 units SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.
- Formerly AET 299
Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

**ENGINEERING AND ENGINEERING TECHNOLOGY – ENGIN**

Physical Sciences and Engineering Division
Dennis Smith, Dean
Physical Sciences Building 263
925-685-1230 ext. 2359

**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.

**Program level student learning outcomes**
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: [www.dvc.edu/slo](http://www.dvc.edu/slo) for the most current information.
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
Computer aided drafting and digital media for engineering and architecture

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 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 higher and complete graduation requirements as listed in the catalog. 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. Some courses may satisfy both major and other graduation requirements; however the units are only counted once.

major requirements

<table>
<thead>
<tr>
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</tr>
<tr>
<td>ENGIN 123</td>
<td>3</td>
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<tr>
<td>GEOG 127</td>
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<tr>
<td>PHYS 110</td>
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plus at least 4 units from:

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<tr>
<td>ARCHI 126</td>
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plus at least 3 units from:

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plus at least 3 units from:

<table>
<thead>
<tr>
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<th>Units</th>
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<tbody>
<tr>
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plus at least 3 units from:

<table>
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<tbody>
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plus at least 3 units from:

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plus at least 3 units from:

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plus at least 3 units from:

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<td>ENGIN 129</td>
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<td>ENGIN 222</td>
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<td>ENGIN 223</td>
<td>3</td>
</tr>
<tr>
<td>ENGIN 298</td>
<td>0.5-3</td>
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</table>

total minimum required units 34

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 higher and complete graduation requirements as listed in the catalog. 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 major and other graduation requirements; however the units are only counted once.

major requirements

<table>
<thead>
<tr>
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<td>CHEM 108</td>
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<td>ENGIN 120</td>
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<tr>
<td>ENGIN 122</td>
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<td>ENGIN 126</td>
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plus at least 3 units from:

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<tbody>
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plus at least 3 units from:

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<td>MATEC 121</td>
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plus at least 3 units from:

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<tbody>
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<td>ENGIN 222</td>
<td>3</td>
</tr>
<tr>
<td>ENGIN 223</td>
<td>3</td>
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</tbody>
</table>

total minimum required units 34
Certificate of achievement - Civil design drafting technology

This certificate program prepares students for an entry level job as a civil drafter. Drafters work under the supervision of civil or structural engineers, architects, and/or surveyors as support staff in jobs requiring them to prepare, interpret, and revise technical drawings, or gather and categorize field data. Engineering technicians work as support staff in field, laboratory and/or office environments.

To earn a certificate of achievement, students must complete each of the required courses with a “C” grade or higher. Some courses are not offered every term 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>
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</thead>
<tbody>
<tr>
<td>CONST 114</td>
<td>Blueprint Reading</td>
<td>3</td>
</tr>
<tr>
<td>ENGIN 120</td>
<td>Engineering Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ENGIN 121*</td>
<td>Engineering Drawing /Descriptive Geometry</td>
<td>3</td>
</tr>
<tr>
<td>ENGIN 123</td>
<td>Principles of Civil Drafting</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 127</td>
<td>Introduction to Global Positioning Systems</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 110</td>
<td>Elementary Physics</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>
</tr>
</thead>
<tbody>
<tr>
<td>ARCHI 126</td>
<td>Computer Aided Design and Drafting - AutoCAD</td>
<td>4</td>
</tr>
<tr>
<td>ENGIN 126</td>
<td>Computer Aided Design and Drafting - AutoCAD</td>
<td>4</td>
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</table>

plus at least 4 units from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCHI 226</td>
<td>Computer Aided Drafting Design, Advanced Concepts - AutoCAD</td>
<td>4</td>
</tr>
<tr>
<td>ENGIN 226</td>
<td>Computer Aided Drafting Design, Advanced Concepts - AutoCAD</td>
<td>4</td>
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plus at least 3 units from:

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</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>
</tr>
</thead>
<tbody>
<tr>
<td>CONST 116</td>
<td>Plane Surveying</td>
<td>3</td>
</tr>
<tr>
<td>ENGIN 140</td>
<td>Plane Surveying I</td>
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</table>

plus at least 3 units from:

<table>
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<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>
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</table>

plus at least 3 units from:

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<tr>
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<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>GEOG 125</td>
<td>Introduction to Geographic Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 128</td>
<td>Advanced Global Positioning Systems</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 160*</td>
<td>Introduction to Remote Sensing</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 162</td>
<td>Maps and Cartography</td>
<td>3</td>
</tr>
</tbody>
</table>

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

total minimum required units 35

Certificate of achievement - Mechanical design drafting technology

This certificate program prepares students for an entry level job as a mechanical drafter. Drafters work under the supervision of project engineers, senior designers and machinists to prepare, interpret and revise technical drawings using computer-aided-drafting (CAD) methods. Engineering technicians work as support staff in field, laboratory and/or office environments.

To earn a certificate of achievement, students must complete each of the required courses with a “C” grade or higher. Some courses are not offered every term 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>4</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>
</tbody>
</table>

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

total minimum required units 27

Certificate of achievement - Civil drafting, CAD

This certificate program prepares students for further study or an entry-level training position in jobs requiring them to prepare and revise technical drawings used in civil engineering and surveying.
MATEC 120 Introduction to Machine Technology .......... 4
PHYS 110 Elementary Physics......................................... 3

plus at least 3 units from:
ENGIN 111 Mathematics for Technicians......................... 4
MATH 121* Plane Trigonometry........................................ 3

plus at least 3 units from:
ENGIN 239* Statics and Strengths of Materials .................. 4
MATEC 121 Machine Processes II..................................... 3
MATEC 222 Introduction to Computer Numerical Control........ 3

plus at least 3 units from:
ARTDM 160* 3D Modeling and Animation I........................ 3
ENGIN 129 Introduction to SolidWorks............................ 4
ENGIN 222 Principles of Structural Steel Drafting................. 3
ENGIN 223 Principles of Pipe Drafting............................. 3
ENGIN 298 Independent Studies..................................... 0.5-3

total minimum required units 34

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

Certificate of achievement - Mechanical drafting, CAD
This certificate program prepares students for further study or an entry-level training position in jobs requiring them to prepare and revise technical drawings used in mechanical engineering, machining and/or manufacturing.

To earn a certificate of achievement, students must complete each of the required courses with a “C” grade or higher. Some courses are not offered every term. Consult with the program director for assistance in scheduling classes.

required courses

units
required courses
units
COMSC 100 Introduction to Computers and Information Systems............................................. 3
ENGIN 120* Engineering Drawing................................... 3
ENGIN 122 Principles of Mechanical Drafting.......................... 3
ENGIN 126 Computer Aided Design and Drafting - AutoCAD..................................................... 4
ENGIN 226 Computer Aided Drafting Design, Advanced Concepts - AutoCAD.................................. 4
MATEC 120 Introduction to Machine Technology.......................... 4

plus at least 3 units from:
ENGIN 111 Mathematics for Technicians.......................... 4
MATH 114 Geometry.................................................. 3

total minimum required units 24

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

Certificate of accomplishment - Computer aided drafting and digital media for engineering and architecture
Drafters create drawings and plans to specify dimensions, materials and processes for the finished product. Such drawings and plans provide guidance to those working to complete the finished product. Drafters also render drawings from blueprints, sketches, and photos and other sources which show the interplay of components ad their relationships to one another, and to provide guidance for final assembly.

To earn a certificate of accomplishment, students must complete each of the required courses with a “C” grade or higher. Some courses are not offered every term. Consult with the program director for assistance in scheduling classes.

required courses

units
ARCHI 126 Computer Aided Design and Drafting - AutoCAD.......................................................... 4
ENGIN 126 Computer Aided Design and Drafting - AutoCAD.......................................................... 4

plus 4 units from:
ARCHI 226 Computer Aided Drafting Design, Advanced Concepts - AutoCAD................................ 4
ENGIN 226 Computer Aided Drafting Design, Advanced Concepts - AutoCAD................................ 4

plus 2 units from:
ARCHI 119 Introduction to Technical Drawing.......................... 3
ARCHI 120 Introduction to Architecture and Environmental Design.................................................. 3
CONST 114 Blueprint Reading........................................... 3
ENGIN 119 Introduction to Technical Drafting.......................... 3

plus 3 units from:
ARCHI 135 Digital Tools for Architecture.................................................. 4
ARTDM 160 3D Modeling and Animation I................................. 3
ENGIN 129 Introduction to SolidWorks.................................. 3
GEOG 125 Introduction to Geographic Information System.................................................. 3

total minimum required units 13

ENGIN-110 Introduction to Engineering
3 units 

• 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**
3 units LR
- 90 hours lecture/36 hours laboratory per term
- Prerequisite: MATH 110 or equivalent
- Note: The hand-held calculator will be used extensively as an aid to problem solving

A study of algebraic operations, factoring, fractional equations, quadratic equations, systems of equations, and trigonometric functions, especially as they apply to technical areas. Practical application to real job problems. CSU

**ENGIN-119 Introduction to Technical Drawing**
3 units SC
- 36 hours lecture/72 hours laboratory/36 hours laboratory by arrangement per term
- Note: Same as ARCHI 119; for students with no previous drafting experience. Credit by examination option available.

Introduction to the use of drawing tools, technical lettering and line work, geometric construction, sketching and shape description, orthographic projection, dimensioning, section views, auxiliary views and pictorials. 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: ENGIN 119 or equivalent
- Recommended: ARCHI 119 or equivalent

Introduction to orthographic, oblique and perspective projections. Relationships of points, lines and planes. Auxiliary views, dimensioning, tolerancing, threads and fasteners. Introduction to solid modeling CAD system and use of the computer to produce engineering drawings. Introduction to conceptual design and graphics as a form of communication in the engineering field. CSU, UC

**ENGIN-121 Engineering Drawing/Descriptive Geometry**
3 units LR
- 36 hours lecture/72 hours laboratory/36 hours laboratory by arrangement per term
- Recommended: ENGIN 120 or equivalent and MATH 121 or equivalent (may be taken concurrently)

Space relationships of points, lines, and surfaces; double auxiliaries, curved and warped surfaces; intersections, developments, vector analysis, introduction to three-dimensional CAD systems and solid modeling to solve descriptive geometry problems, engineering applications, graphical mathematics. CSU, UC

**ENGIN-122 Principles of Mechanical Drafting**
3 units LR
- 36 hours lecture/72 hours laboratory/36 hours laboratory by arrangement per term
- Recommended: ARCHI 119 or 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 SC
- May be repeated once
- 54 hours lecture/54 hours laboratory/36 hours laboratory by arrangement per term
- Recommended: ARCHI 119 or ENGIN 119 or equivalent
- Note: Same as ARCHI 126; may be repeated once when software changes. Credit by examination option available.

Introductory course covering the computer application AutoCAD as it relates to the creation of technical drawings. Course covers two dimensional computer aided drafting of objects in orthographic projection. Hands-on training utilizing a comprehensive overview of the software package and its applications in architectural drafting is stressed. Students are recommended to have a basic knowledge of technical drawing. CSU, UC (credit limits may apply to UC - see counselor)

**ENGIN-129 Introduction to SolidWorks**
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 will cover 2D and 3D computer aided drafting principles using feature manipulation tools, dimensioning, sections, swept and loft features, as well as assembly
drawing. Previous knowledge of SolidWorks software is not required. CSU

**ENGIN-130 Energy, Society, and the Environment**
3 units SC
- 54 hours lecture/36 hours laboratory by arrangement per term
- Recommended: Eligibility for ENGL 122 or equivalent and MATH 110 or equivalent

An introduction to the sources, uses, economics, and environmental impacts of energy in contemporary society. The role of non-renewable and renewable energy systems and technologies in creating and maintaining sustainable energy systems is emphasized. CSU, UC

**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) and eligibility for ENGL 122 or equivalents
- 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
- Prerequisite: MATH 192 or equivalent
- Recommended: MATH 193 or equivalent (may be taken concurrently)

Methods of problem solving and data visualization in engineering and science using the MATLAB programming language will be introduced. Topics include numerical integration and differentiation, solution of systems of equations, regression, roots of equations and solution of differential equations. Programming with functions, local and global variables, file input and output, data formatting, induction, iteration, recursion and elements of object oriented programming will also be covered. CSU, UC

**ENGIN-140 Plane Surveying**
3 units SC
- 54 hours lecture/54 hours laboratory per term
- Prerequisite: MATH 121 or equivalent
- Note: Same as CONST 116

Principles and practices of surveying including measurement of distances, directions and elevations; measuring standards; introduction to electronic measurements and metric units; calibration, systematic and random-error analysis; traverse calculations; use and care of surveying instruments including tapes, transits, and levels; GPS measurements; map reading; horizontal and vertical curves and mapping. 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 concepts and problems in engineering. Specific topics to be announced in the schedule of classes. CSU

**ENGIN-160 Introduction to Manufacturing**
3 units LR
- 54 hours lecture/54 hours laboratory per term
- Recommended: ENGIN 120 or equivalent

This course will cover production and manufacturing techniques of metals, alloys and polymers. Students will learn techniques of casting, forming, forging, extrusion and sintering of materials. Blueprint reading, the use of measuring instruments and gauges, layout techniques and material removal using machine tools will also be covered. Instruction will include the set-up and operation of machine shop equipment. Principles of quality control and quality assurance with special emphasis on ANSI Y14 standards will be covered. CSU

**ENGIN-222 Principles of Structural Steel Drafting**
3 units LR
- 36 hours lecture/72 hours laboratory/36 hours laboratory 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 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 SC
- 54 hours lecture/54 hours laboratory/36 hours laboratory by arrangement per term
- Recommended: ENGIN 126 or ARCHI 126 or equivalent
- Note: Same as ARCHI 226. May be repeated once when software changes.

Course is designed for students with previous knowledge and experience in using AutoCAD. Course covers (1) surface/wireframe and solid modeling features of AutoCAD for 3-dimensional modeling 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)

**ENGIN-229 Advanced Concepts in SolidWorks**
4 units SC
- May be repeated once
- 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 SolidWorks. Students will continue to learn advanced techniques for capturing design intelligence. 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 tackling references and interdependencies is a driving consideration in the course. Upon completion of the course, students will exhibit a demonstrated competence in a comprehensive range of SolidWorks 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, 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. CSU, UC

**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. 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 ENGIN 136 or equivalent and eligibility for ENGL 122 or equivalent

Study of the effects of concentrated and distributed forces on the equilibrium of rigid bodies, structures, beams, flexible cables and fluid statics. Applying the method of sections and free body diagrams to solve truss problems. The study of wedges, screws, bearings, brakes and other problems involving friction. Virtual work and potential energy methods in the determination of equilibrium conditions in machines and structures. CSU, UC

**ENGIN-256 Dynamics**
3 units LR
- 54 hours lecture/18 hours laboratory by arrangement per term
- Prerequisite: ENGIN 255 or equivalent
- Recommended: MATH 294 or equivalent

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-257 Statics and Strength of Materials**
3 units LR
- 54 hours lecture/18 hours laboratory per term
- Prerequisite: PHYS 130 or equivalent
- Co-requisite: MATH 294 or equivalent (may be taken previously)
- Recommended: MATH 194 or equivalent

A study of mechanics and strength of materials, including equilibrium of particles and rigid bodies, analysis of truss and frame structures, concepts of stress and strain, linear elastic materials, axially-loaded structural elements, bending and torsion in circular and hollow shafts. Deflection of beams, buckling of columns and energy methods are also discussed. CSU, UC
ENGIN-258  Introduction to Solid Mechanics
3 units LR
- 54 hours lecture/18 hours laboratory per term
- Prerequisite: ENGIN 255 or equivalent
- Co-requisite: MATH 294 or equivalent (may be taken previously)

This course covers the fundamentals of solid mechanics. Definitions of stress and strain and their relationship in two and three dimensional problems are presented. Stress and strain transformations are discussed. Equations for torsion and bending of bars are derived and deflection of beams and shafts are studied. Buckling of columns and energy methods are also covered. 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

ENGIN-299  Student Instructional Assistant
.5-3 units SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. 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 program. The goals of the course are to develop and improve English language skills and to introduce students to the college environment.

ESL-072  ESL: Pronunciation/Listening Skills
2 units 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 one hour scheduled study group. Students must check the class 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.
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.

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.

This course is designed for ESL students at the intermediate level 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.

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 intermediate 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 learn how to do basic computer research.

This course is designed for ESL students at the high intermediate level who need preparation for college level reading and related study skills. Class activities include a close exploration of the reading process- especially of textbook materials; vocabulary development; listening practice and note-taking; use of library, dictionary and other reference resources; academic and cultural orientation.

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.

ENGLISH – ENGL  

English Division  
Ellen Kruse, Interim Dean  
Faculty Offices 136  
925-685-1230 ext. 2519  

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.

Program level student learning outcomes  
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

Associate in arts degree  

English  

Associate in arts degree - English  
The English major at Diablo Valley College (DVC) offers students the opportunity to prepare for a broad range of professions through the study of language, literature, and composition, as well as the opportunity to transfer to UC, CSU, and other four year colleges and universities to earn a bachelor’s degree. The English major curriculum at DVC hones a student's critical thinking, reasoning, and communication skills as it also prepares students pursuing careers in law, government, business, entertainment (film, television, and theater), advertising, writing, editing, and education.

DVC’s English major consists of 21 units of study. Students are required to take 6 units of core reading and composition courses, where they will develop their ability to craft clear prose through writing, reading, and research. In addition, students are required to complete 9 units of core genre and survey courses, and 6 units of specialized literature and writing courses, thereby developing individual interests and breadth of knowledge.

The DVC English major is intended for transfer. Students who intend to transfer must consult with a program advisor or counselor to ensure that the requirements for transfer to four-year institutions of their choice are met. Students who intend to transfer are advised to select General Education Option 2 (IGETC) or Option 3 (CSU Breadth). Option 1 (DVC General Education) is not generally advised.

To earn an associate in arts degree with a major in English, students must complete each course used to meet a major requirement with a “C” or higher, maintain an overall GPA of 2.5 or higher in the coursework required for the major and complete all graduation requirements as listed in the catalog. Some courses may satisfy both major and other graduation requirements; however, the units are only counted once.

major requirements  

Group 1: Core reading and composition courses  
complete a minimum of 6 units from  
ENGL 122*  Freshman English: Composition and Reading ................................................. 3  
ENGL 123*  Critical Thinking: Composition and Literature .................................................. 3  
ENGL 126*  Critical Thinking: The Shaping of Meaning in Language................................. 3

Group 2: Core genre  
complete a minimum of 3 units from  
ENGL 150  Introduction to Literature ......................... 3  
ENGL 151  The Short Story .................................... 3  
ENGL 153  Contemporary Poetry ............................ 3  
ENGL 180**  Literature of the Drama ........................ 3

Group 3: Core survey  
complete a minimum of 6 units from  
ENGL 154  Shakespeare and His World ................. 3  
ENGL 252  Early English Literature ........................ 3  
ENGL 253  Survey of Late English Literature .......... 3  
ENGL 262  Survey of American Literature I (First Contact-1865) ..................................... 3  
ENGL 263  Survey of American Literature .............. 3

Group 4: electives - Specialized literature and writing  
complete a minimum of 6 units from:  
ENGL 152  The Short Film .................................. 3  
ENGL 162  Language, Literature and Culture ......... 3  
ENGL 163  Asian American Literature .................. 3  
ENGL 164  Native American Literatures ................. 3  
ENGL 166  African American Literature ................ 3  
ENGL 167  Latin American Literature .................... 3  
ENGL 168  The Literatures of America .................... 3  
ENGL 170  World Mythology ................................. 3
ENGL 090  Introduction to College English
2.5 units SC
• Non degree applicable
• 45 hours lecture per term
• Recommended: Eligibility for ENGL 098 or equivalent
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 and Writing
1 unit P/NP
• May be repeated three times
• Non degree applicable
• 9 hours lecture/27 hours laboratory per term
• Note: Sections for ESL students available
A series of short-term, one-unit mini-courses which develop specific skills in reading and writing. Courses include reading comprehension, effective reading strategies, spelling/vocabulary, sentence structure, and punctuation.

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 095  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
• Formerly ENGL 105
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 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 or equivalent
• 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 or equivalent
• 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 099  English Grammar and Usage
3 units SC
• Non degree applicable
• 54 hours lecture per term
• Formerly ENGL 110
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: ENGL 096 or reading/writing assessment process or equivalent
- 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: ENGL 098 or reading/writing assessment process or equivalent
- Note: Students may apply either ENGL 116 or 118 to the associate degree, but not both courses
This course helps students to improve their expression of ideas in college-level expository essays. Through continual writing practice, students will improve their skills in observation, fluency, organization, and revision, as well as other parts of the writing process. Students will learn to analyze a variety of texts with an emphasis on nonfiction.

ENGL-122 Freshman English: Composition and Reading
3 units LR
- 54 hours lecture per term
- Prerequisite: Successful completion of ENGL 116 and ENGL 118 or equivalent recommendation from assessment process or English AP score of 3
This course engages students regularly in the writing and reading process, requiring a substantial amount of reading of significant literature. 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. 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 or equivalent
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 technical environments of science and industry, with an emphasis on selecting appropriate evidence, and on understanding and employing various levels of technical vocabulary and abstraction. Strategic use of visual support, technical metaphor, and application of communication principles to technical settings are also addressed. CSU

ENGL-140 Tutor Training
3 units SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
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 or equivalent
This course will focus on representative works from the four major genres of literature (poetry, drama, the short story, the novel). 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 or equivalent
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 or equivalent
This course focuses on the reading, critical study, critical analysis, and discussion of contemporary poetry. Postmodern American poetry is emphasized, although consideration will also be given to contemporary world poetry and other poetry written in English. Earlier traditions, such as modernism, will be briefly discussed. Historical, social, cultural, and psychological contexts will be provided. Consideration will be given to the forms, functions, and definitions of the poetry studied. Students should reach a heightened awareness and understanding of language and artistic excellence. CSU, UC

ENGL-154  Shakespeare and His World
3 units SC
- 54 hours lecture per term
- Recommended: ENGL 122 or equivalent
Study of the language, structure, characterization, and philosophy of Shakespeare's plays; the historical, social, and artistic forces which helped to shape his works during the Elizabethan and Jacobean ages; the relationship between Shakespeare's work as literature, examined by close analysis and as performing arts, experienced in theater, film, opera, or television. CSU, UC

ENGL-155  Studies in Literature
.5-3 units SC
- May be repeated three times
- Variable hours
- Recommended: ENGL 122 or equivalent
This course focuses on the reading, critical study, critical writing and discussion of a special literature. Consideration will be given to the literature's forms, functions, and definitions. Also of concern will be the literature's significance in terms of historical, social, cultural, and psychological contexts. CSU

ENGL-162  Language, Literature and Culture
3 units SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 116/118 or equivalent
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 viewpoints; 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 or equivalent  
Students will focus on the literary traditions and cultures of Native Americans, and through the study of various oral and written literary works (such as ceremonies, songs, myths, folk tales, oratories, autobiographies, poetry and prose) will examine issues important to Native peoples, such as cultural identity, language, self-determination. CSU, UC

ENGL-166  African American Literature  
3 units  SC  
• 54 hours lecture per term  
• Recommended: ENGL 122 or equivalent  
This course is a study of the major works of fiction and poetry by black writers in 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 or 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 or equivalent  
This course examines literary works of American authors from underrepresented groups: African American, Asian American, Mexican American, and Native American. We will read selected contributions from novels, plays, short stories, nonfiction and poetry to understand the influences that shape 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 or equivalent  
Students read the Hebrew scriptures (Old Testament) and the New Testament as literature, studying the historical, intellectual, and spiritual environments in which the texts were composed. 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-176  The Graphic Novel as Literature  
3 units  SC  
• 54 hours lecture per term  
• Eligibility for ENGL 122 or equivalent  
This course focuses on the reading, critical analysis, and thoughtful discussion of graphic novels - or “art comics” - as a unique branch of literature. The course focuses on non-fiction (memoir and investigative reporting) and fiction
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  Multicultural Literature by American Women
3 units  SC
- 54 hours lecture per term
- Recommended: ENGL 122 or equivalent

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 or equivalent
- Note: The student is limited to a maximum of 12 units in any combination of ENGL 222, 223, and 224

Students will analyze the varied creative writing techniques of selected authors and present original writing for discussion and criticism by the class and the instructor. 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
- Prerequisite: Eligibility for ENGL 122 or equivalent
- 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
- Prerequisite: Eligibility for ENGL 122 or equivalent
- 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. CSU, UC (credit limits may apply to UC - see counselor).

ENGL-225  Writing About Cultural Identity in America
3 units  SC
- May be repeated once
- 54 hours lecture per term
- Prerequisite: Eligibility for ENGL 122 or equivalent

This workshop of expository writing provides an environment in which students will develop skills related to research techniques, interviewing, and specialties of nonfiction such as autobiography, biography, and creative nonfiction. Students will read works of American authors with particular attention paid to multicultural groups. Students will present original prose writing (approximately 6000 words) for informal discussion and criticism. CSU, UC

ENGL-252  Early English Literature
3 units  SC
- 54 hours lecture per term
- Prerequisite: ENGL 122 or equivalent

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;
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Catalog 2010-2011
PRoGRAMS anD COURSES

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 such as painting, music, or architecture. 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. CSU, UC

ENGL-263 Survey of American Literature
3 units SC
• 54 hours lecture per term
• Prerequisite: ENGL 122 or equivalent
Survey of major literary works produced by American writers from approximately 1865 to the present. Students read poetry, fiction, and drama by American poets, prose writers, and playwrights. Changes in literary style are closely examined and compared with corresponding changes in other art forms- painting, music, sculpture, architecture, film produced in America and abroad during the period. CSU, UC

ENGL-272 Early World Literature
3 units SC
• 54 hours lecture per term
• Recommended: ENGL 122 or equivalent
Reading, presentation, and discussion of representative oral and written literature from cultures around the world from ancient times to the sixteenth century in modern English translations. CSU, UC

ENGL-273 Late World Literature
3 units SC
• 54 hours lecture per term
• Recommended: ENGL 122 or equivalent
Reading, presentation and discussion of representative works of literature from cultures around the world from the seventeenth century to modern times in English translations. CSU, UC

ENGL-298 Independent Study
.5-3 units SC
• May be repeated three times
• Variable hours
• Recommended:
  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

FILM – FILM

Applied and Fine Arts Division
Michael Almaguer, Dean
Humanities Building 112 and 113
925-685-1230 ext. 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 or equivalent

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
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
</table>
| FLM-120     | Film Genre                                       | 1 unit  | May be repeated three times  
• 18 hours lecture per term  
• Recommended: Eligibility for ENGL 122 or equivalent  
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 |
| FLM-130     | Great Directors                                  | 1 unit  | May be repeated three times  
• 18 hours lecture per term  
• Recommended: Eligibility for ENGL 122 or equivalent  
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 |
| FLM-140     | American Cinema/American Culture                 | 3 units | 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 |
| FLM-150     | Topics in Film                                   | 3-4 units | May be repeated three times  
• Variable hours  
• Recommended: Eligibility for ENGL 122 or equivalent  
A supplemental course in film to provide a study of current concepts and problems in film. Specific topics will be announced in the schedule of classes. CSU |
| FLM-160     | American Ethnic Cultures in Film                 | 3 units | 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 |
| FLM-165     | Digital Editing                                  | 3 units | 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term  
An introduction to the techniques, concepts and aesthetics of digital non-linear, computerized editing for film, television and digital media. The student will become familiar with various professional software programs and develop an understanding of organization, timelines and story as well as editing for visual and audio effect. CSU |
| FLM-180     | Comparative Film Studies                         | 3 units | 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) |
| FLM-280     | Introduction to Film: American Cinema 1900-1950  | 3 units | 54 hours lecture per term  
• Recommended: Eligibility for ENGL 122 or equivalent  
This course is a survey of major trends in American Cinema from 1900 to the demise of the studio system in the 1950s. The methodology includes lectures and the viewing of key films from notable artists and movements that have influenced the development of film arts around the world. In addition, this course will analyze how social, economic, and historical forces shape film art, as well as, the development of global media culture, and understanding how cinema communicates as an art form. CSU, UC |
FILM-281  Introduction to Film: World Cinema 1900-1960
3 units  SC
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent
This course is a survey of major trends in World Cinema from 1900 to the French New Wave of the 1960s. The methodology includes lectures and the viewing of key films from notable artists and movements that have influenced the development of film arts around the world. An analysis of how social, economic, and historical forces shape film art will be stressed, as well as, the development of global media culture, and understanding how film communicates as an art form. CSU, UC (credit limits may apply to UC - see counselor)

FILM-282  Introduction to Film: American Cinema 1950 to the Present
3 units  SC
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent
This course is a survey of major trends in American Cinema from the demise of the studio system in the 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
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent
This course is a survey of major trends in World Cinema since 1960 from French New Wave to the growth of Asian, Latin American, and Third-World cinema. The course methodology includes lectures and the viewing of key films from notable artists and movements that have influenced the development of film arts around the world. It will stress the social, economic, and historical forces that shape film art, as well as the development of global media culture and understanding how film communicates as an art form. CSU, UC

FILM-284  Introduction to Film - Women in Cinema
3 units  SC
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent
This course is a survey of the major influences of women on film history. The course includes lectures and the viewing of key films made by notable women directors, producers, screenwriters, editors and actors who have influenced the development of film arts around the world. An analysis of how social, economic, and historical forces have shaped women's role in the development of film will be stressed, as well as, growth of global media culture, and how film communicates as an art form. CSU, UC

FILM-290  Film and TV Script Writing - Beginning
3 units  SC
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent
The purpose of this class is to learn to write screenplays. Therefore the student will study film terms and formats, work with treatment, scenario and shooting scripts, analyze film and television clips, shorts, tapes, and full-length films with emphasis on understanding the writer's perspective. Numerous writing assignments and exercises will be assigned with the intent of developing a student's ability to write for a visual medium. CSU

FILM-291  Film and TV Scriptwriting - Intermediate
3 units  SC
• 54 hours lecture per term
• Prerequisite: FILM 290 or equivalent
• Recommended: Eligibility for ENGL 122 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
The course teaches the student to execute short, single-camera film styled projects focusing on the skills necessary to produce basic digital/film narrative projects by applying the introductory elements of the class including: script visualization, camera operation, lighting setup, lens selection, digital production, visual concepts and basic digital editing. 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
This course teaches the student to execute intermediate level single-camera film styled narrative projects by producing projects that utilize mixed soundtracks, sophisticated lighting schemes, sync sound, polished editing and the use of visual metaphors. CSU, UC (credit limits may apply to UC - see counselor)
**FILM-294 Film and TV Scriptwriting - Advanced**

3 units  P/NP  
- 54 hours lecture per term
- Prerequisite: FILM 291 or equivalent
- Recommended: Eligibility for ENGL 122 or equivalent

The purpose of this class is for the advancing student to produce a feature length screenplay. Therefore, emphasis will be placed on developing and refining authentic characters, solid stories and dramatic structure. There will be numerous writing exercises and evaluations. CSU

**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

**FILM-299 Student Instructional Assistant**

.5-3 units  SC  
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

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**FRENCH – FRNCH**

Students with prior foreign language instruction should check with a language teacher regarding proper placement in foreign language courses. The following system is generally used to determine the appropriate term of college work based on high school language: two years equal one college term; three years equal two college terms; four years equal three college terms.

**Certificate of achievement French**

This certificate of achievement was created to give students the opportunity to show potential employers in this country and in other countries that the student has completed a certain number of courses in French and prepares students with an intermediate to advanced knowledge of French and familiarizes them with the culture of the Francophone world.

This certificate of achievement provides students, prospective employers and others with documented evidence of persistence and academic accomplishment in the language. The certificate requires completion of at least 13 units from one of the following lists of courses which must be completed with a grade of “C” grade or higher.

**List A**
- 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

**List B**
- FRNCH 121 First Term French ........................................... 5
- FRNCH 155 First Term Conversational French ...................... 3
- FRNCH 156 Second Term Conversational French .................. 3
- FRNCH 157 Third Term Conversational French ..................... 3
- FRNCH 220 Third Term French .......................................... 3
- FRNCH 221 Fourth Term French ......................................... 5

**total minimum required units 13**

**FRNCH-120 First Term French**

5 units  SC  
- 90 hours lecture/18 hours laboratory by arrangement per term

This is a basic course in understanding, speaking, reading, and writing French. There is extensive utilization of cultural material and information. 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
A second-term basic course at a more advanced level in understanding, speaking, reading, and writing French. Cultural material and information will also be covered. 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 classes. 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
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
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 on to 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
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 120 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. 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. 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  
- 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
FRNCH-299 Student Instructional Assistant
.5-3 units SC
• May be repeated three times
• Variable hours
• Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

GEOGRAPHY – GEOG

Physical Sciences and Engineering Division
Dennis Smith, Dean
Physical Sciences Building 263
925-685-1230 ext. 2359

Possible career opportunities
Geography is an interdisciplinary study focusing on the spatial relations of physical, cultural and economic systems of our world. As such, geographers are employed in a wide array of fields in many capacities such as: city/county planning; 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.

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

Associate in arts degree - Social/cultural geography
The Social-Cultural Geography major at Diablo Valley College offers students the opportunity to prepare for a broad range of professions through the study the spatial distribution of languages, religions and other aspects of human culture. Students will be prepared to transfer to UC, CSU and other four-year colleges and universities to earn a Bachelor’s degree. DVC prepares students to pursue careers in government, business, international relations, and education.

The DVC Social-Cultural Geography major consists of 18 units of required courses in which students develop an understanding of the origin, diffusion and spatial distribution of various attributes of human culture.

The DVC Social-Cultural Geography major is intended for transfer. Students who intend to transfer must consult with a program advisor or counselor to ensure that the requirements for transfer to four-year institutions of their choice are met. Students who intend to transfer are advised to select General Education Option 2 (IGETC) or Option 3 (CSU Breadth). Option 1 (DVC General Education) is not generally advised.

To earn an associate in arts degree with a major in Social-Cultural Geography, students must complete each course used to meet a major requirement with a “C” grade or higher and maintain an overall GPA of 2.5 or higher in the coursework required for the major, and complete all graduation requirements as listed in the catalog. Some courses may satisfy both major and other graduation requirements; however, the units are only counted once.

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<th>units</th>
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<tbody>
<tr>
<td>ANTHR 130 Cultural Anthropology</td>
<td>3</td>
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<td>GEOG 120 Physical Geography</td>
<td>3</td>
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<td>GEOG 130 Cultural Geography</td>
<td>3</td>
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<td>GEOG 135 World Regional Geography</td>
<td>3</td>
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<td>GEOG 162 Maps and Cartography</td>
<td>3</td>
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<td>SOCIO 131 The Urban Community</td>
<td>3</td>
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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 higher and complete graduation requirements as listed in the catalog. Some courses may satisfy both major and other graduation requirements; however, the units are only counted once.

### Geographic Information Systems (GIS)

**Major Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>GEOG 125</td>
<td>Introduction to Geographic Information Systems (GIS)</td>
<td>3</td>
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<tr>
<td>GEOG 126</td>
<td>Advanced Geographic Information Systems (GIS)</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 127</td>
<td>Introduction to Global Positioning Systems (GPS)</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 128</td>
<td>Advanced Global Positioning Systems (GPS)</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 160</td>
<td>Remote Sensing</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 162</td>
<td>Maps and Cartography</td>
<td>3</td>
</tr>
</tbody>
</table>

**Plus at least 6 units from:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSC 100</td>
<td>Introduction to Computer and Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>COMSC 100L</td>
<td>Introduction to Computer Software</td>
<td>1</td>
</tr>
<tr>
<td>COMSC 110</td>
<td>Introduction to Programming</td>
<td>4</td>
</tr>
<tr>
<td>COMSC 138</td>
<td>Using Visual Basic for Applications</td>
<td>2</td>
</tr>
<tr>
<td>COMSC 172</td>
<td>UNIX and Linux Administration</td>
<td>2</td>
</tr>
<tr>
<td>COMSC 255</td>
<td>Programming with Java</td>
<td>4</td>
</tr>
</tbody>
</table>

**Associate in Science Degree - Meteorology**

The DVC Meteorology major is intended for transfer. Students who intend to transfer must consult with a program advisor or counselor to ensure that the requirements for transfer to four-year institutions of their choice are met. Students who intend to transfer are advised to select General Education Option 2 (IGETC) or Option 3 (CSU Breadth). Option 1 (DVC General Education) is not generally advised.

To earn an associate in science degree with a major in Meteorology, students must complete each course used to meet a major requirement with a “C” grade or higher, maintain an overall GPA of 2.5 or higher in the coursework required for the major, and complete all graduation requirements as listed in the catalog. Some courses may satisfy both major and other graduation requirements; however, the units are only counted once.

**Major Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>GEOG 120</td>
<td>Physical Geography</td>
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<tr>
<td>GEOG 121</td>
<td>Physical Geography Lab</td>
<td>1</td>
</tr>
<tr>
<td>GEOG 135</td>
<td>World Regional Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 140</td>
<td>Introduction to Weather</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 141</td>
<td>Introduction to Weather Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>GEOG 162</td>
<td>Maps and Cartography</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 120</td>
<td>General College Physics</td>
<td>4</td>
</tr>
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</table>

**Total Minimum Required Units**

<table>
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<tr>
<th>Units</th>
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<tr>
<td>18</td>
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</table>

**Associate in Science Degree - Physical Geography**

The Physical Geography major at Diablo Valley College offers students the opportunity to prepare for a range of professions through the study of a broad spectrum of courses related to the physical environment. Students will be prepared to transfer to UC, CSU and other four-year colleges and universities to earn a Bachelor’s degree. DVC hones students’ spatial and analytical skills while preparing them for careers in spatial technologies and environmental sciences.

The DVC Physical Geography major consists of 24 units of study. Students are required to take 14 units of core courses in which they develop an understanding of the physical environment and learn how to acquire, map and analyze spatial data relevant to the physical environment.

The DVC Physical Geography major is intended for transfer. Students who intend to transfer must consult with a program advisor or counselor to ensure that the requirements for transfer to four-year institutions of their choice are met. Students who intend to transfer are advised to select General Education Option 2 (IGETC) or Option 3 (CSU Breadth). Option 1 (DVC General Education) is not generally advised.

To earn an associate in science degree with a major in Physical Geography, students must complete each course used to meet a major requirement with a “C” grade or
higher and maintain an overall GPA of 2.5 or higher in the
coursework required for the major, and complete all gradu-
ation requirements as listed in the catalog. Some courses
may satisfy both major and other graduation requirements;
however, the units are only counted once.

**major requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>GEOG 120</td>
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<tr>
<td>GEOG 135</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 140</td>
<td>3</td>
</tr>
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<td>GEOG 141</td>
<td>1</td>
</tr>
<tr>
<td>GEOG 162</td>
<td>3</td>
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**plus 4 units from the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>BIOSC 126</td>
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<tr>
<td>GEOG 125</td>
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<tr>
<td>GEOG 127</td>
<td>3</td>
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<tr>
<td>GEOL 120</td>
<td>3</td>
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<tr>
<td>GEOL 122</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 125</td>
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**total minimum required units**

<table>
<thead>
<tr>
<th>Units</th>
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<tbody>
<tr>
<td>18</td>
</tr>
</tbody>
</table>

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**Certificate of achievement - Geographic information systems/Global positioning system**

The geographic information systems (GIS)/global positioning system (GPS) program is designed to prepare students for entry into careers that employ generalized or special-
ized applications of GIS. GIS is a versatile and powerful
technology that allows data input, data management, analy-
sis and display of result within a single setup. Most local,
state, and federal government agencies use GIS, as do busi-
nesses, planners, architects, foresters, geologists and a host
of other occupations. Students learn technical and analyti-
cal 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 program-
mer, GIS coordinator, GIS supervisor and GIS manager.

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

**required courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 125</td>
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<tr>
<td>GEOG 126</td>
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<tr>
<td>GEOG 127</td>
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<tr>
<td>GEOG 128</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 160</td>
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</tr>
<tr>
<td>GEOG 162</td>
<td>3</td>
</tr>
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</table>

**plus at least 3 units from:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>ANTHR 126</td>
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<tr>
<td>BIOSC 126</td>
<td>4</td>
</tr>
<tr>
<td>BIOSC 170</td>
<td>3</td>
</tr>
<tr>
<td>COMSC 100L</td>
<td>1</td>
</tr>
<tr>
<td>COOP 170</td>
<td>1-3</td>
</tr>
</tbody>
</table>

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**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 special-
ized applications of GIS. GIS is a versatile and powerful
technology that allows data input, data management, analy-
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To earn a certificate of accomplishment, students must complete each course used to meet a certificate requirement with a “C” grade or higher. Required courses are available in the evening and during the day.

**required courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 125</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 126</td>
<td>3</td>
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<tr>
<td>GEOG 127</td>
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<tr>
<td>GEOG 128</td>
<td>3</td>
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<td>GEOG 160</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 162</td>
<td>3</td>
</tr>
</tbody>
</table>

**plus at least 3 units from:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHR 126</td>
<td>3</td>
</tr>
<tr>
<td>BIOSC 126</td>
<td>4</td>
</tr>
<tr>
<td>BIOSC 170</td>
<td>3</td>
</tr>
<tr>
<td>COMSC 100L</td>
<td>1</td>
</tr>
<tr>
<td>COOP 170</td>
<td>1-3</td>
</tr>
</tbody>
</table>
ENGIN 126  Computer Aided Design and Drafting - AutoCAD .................................................... 4
GEOG 120  Physical Geography .................................................. 3
GEOG 121  Physical Geography Lab ........................................ 1
GEOG 162  Maps and Cartography ............................................ 3
GEOG 298  Independent Study ................................................ 1-3
GEOL 120  Physical Geology .................................................... 3
GEOL 122  Physical Geology Laboratory ................................... 1

**total minimum required units** 15

**GEOG-120  Physical Geography**
3 units  SC
- 54 hours lecture per term
- Prerequisite: MATH 110 or one year of high school algebra or equivalent

A general course to introduce the fundamental principles of physical geography. This course is intended to provide an intelligent understanding of the Earth as the home of human beings and to show the interrelationships found within the physical environment. Quantitative reasoning, development of mathematical concepts and problem solving are emphasized. CSU, UC

**GEOG-121  Physical Geography Laboratory**
1 unit  SC
- 54 hours laboratory per term
- Prerequisite: GEOG 120 or equivalent (may be taken concurrently)
- Note: Field trips may be included in the course

A laboratory course to supplement GEOG 120 (Physical Geography). Emphasis will be placed on using the skills and tools of modern physical geography and analyzing and interpreting geographic data. Maps, aerial photographs, satellite images, weather instruments and computer analysis are stressed. 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 or equivalent

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 exploitation, and technological innovation are examined in order to understand the interactive relationship between human beings and their environment. 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 Laboratory
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
.3-.4 units LR
• May be repeated three times
• Variable hours

A supplemental course in geography to provide a study of current concepts and problems in geography. Specific topics will be announced in the schedule of classes. 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, sym-

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

GEOG-299 Student Instructional Assistant
.5-.3 units SC
• May be repeated three times
• Variable hours
• Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

GEOLOGY – GEOL

Physical Sciences and Engineering Division
Dennis Smith, Dean
Physical Sciences Building 263
925-685-1230 ext. 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. 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. 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. CSU, UC

### GEOL-124  Earth and Life Through Time Laboratory
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. 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-135  Introduction to Field Geology
2 units LR
- 18 hours lecture/54 hours laboratory per term
- Prerequisite: GEOL 120 and GEOL 122 or equivalents
- Note: Field trips are definitely required. Most trips are to local parks or open spaces and students are responsible for their own transportation to and from these required components.

A course in general field methods of geologic science. The course is designed to provide students with the basic skills required to collect geologic data in the field and the skills necessary for constructing simple geologic maps. Types of fieldwork will include compass and orienteering work, measurement of rock features and descriptions of outcrops, as well as identification and mapping of geologic contacts. Geologic field work can be strenuous; students should expect to walk off trail over rough terrain carrying their own equipment. We will work through rain or shine; only seriously inclement weather will suspend work. CSU, UC

### GEOL-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 direction of the faculty. CSU

### GEOL-299  Student Instructional Assistant
.5-3 units SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU
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 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.

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

Certificate of achievement
Certificate of achievement - German
This certificate of achievement was created to give students the opportunity to show potential employers in this country and in other countries that the student has completed a certain number of courses in German and prepares students with an intermediate to advanced knowledge of German and familiarizes them with the culture of the German-speaking world.

This certificate of achievement provides students, prospective employers and others with documented evidence of persistence and academic accomplishment in the language. The certificate requires completion of at least 13 units from one of the following lists of courses which must be completed with a grade of "C" grade or higher.

List A
- GRMAN 120 First Term German ................................. 5
- GRMAN 121 Second Term German ............................. 5
- GRMAN 220 Third Term German ............................... 5
- GRMAN 221 Fourth Term German ............................. 5
- GRMAN 230 Fifth Term German ............................... 3
- GRMAN 231 Sixth Term German ............................... 3

List B
- GRMAN 121 Second Term German ............................. 5
- GRMAN 155 First Term Beginning Conversational German ......................................................... 3
- GRMAN 156 Second Term Beginning Conversational German ......................................................... 3
- GRMAN 157 Third Term Beginning Conversational German ......................................................... 3
- GRMAN 220 Third Term German ............................... 5
- GRMAN 221 Fourth Term German ............................. 5

Total minimum required units 13

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. 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 Deutch video and audio program. 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. 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 classes. 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 the third term of the beginning German conversational 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 220 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. CSU, UC

GRMAN-221 Fourth Term German
5 units SC
- 90 hours lecture/18 hours laboratory by arrangement per term
- Recommended: GRMAN 221 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. 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

**GRMAN-299  Student Instructional Assistant**  
.5-3 units  SC  
- May be repeated three times  
- Variable hours  
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.  
Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. 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

**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.

**Program level student learning outcomes**

A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: [www.dvc.edu/slo](http://www.dvc.edu/slo) for the most current information.

**Associate in science degree**

**Health education**

**Associate in science degree - Health education**

The Associate in Science (AS) degree in health education exposes the student to a multi-dimensional approach to health by incorporating the study of social, behavioral and physiological sciences. Students will learn about risk factors for disease and disability and be taught behavior-changing skills, all of which have broad applications in fields that teach Health Education such as academic, community, corporate, and/or medical. The course of study also provides a broad foundation in health sciences for those students who want to pursue specialized occupations in the health profession.

Students may apply the knowledge to work in areas such as a Workplace Wellness, County Health Department, Hospital/Health Insurance Health Education Center, State or University Health Center, Planned Parenthood, or any Health Club that offers heath education information.

Students wishing to pursue a career in the field of public health education should consider this two year program as it provides preparation for baccalaureate degrees useful in the field of Health Education.

DVC health education students who intend to transfer must consult with a program advisor or counselor to ensure that the requirements for transfer to four-year institutions of their choice are met. Students who intend to transfer are advised to select either General Education Option 2 (IGETC) or Option 3 (CSU Breadth). General Education Option 1 (DVC General Education) is appropriate for students who do not intend to transfer.

To earn an associate in science degree with a major in health education, students must complete each course used to meet a major requirement with a “C” grade or higher and complete all graduation requirements as listed in the catalog. Degree requirements can be completed by attending classes in the day, the evening, or both. Some courses may satisfy both major and other graduation requirements; however, the units are only counted once

**Co-op 170A Internship in Occupational Work**  
Experience Education............... 2

**HSCI 124 Health and Wellness**.................. 3

**HSCI 140 Human Sexuality**.................. 3

**HSCI 298 Health Science Independent Study**............ 1
and products. CSU products, as well as where to obtain health information, services including health information and health-related services and products. Students will also learn how to critically assess scientific research on methods of improving health and wellness, including physical, mental, spiritual, emotional, environmental and social dimensions. This course examines current scientific research on methods of improving health and wellness, including, but not limited to, nutrition, fitness, mental health, drug abuse, sexuality and behavior change. CSU, UC (credit limits may apply to UC - see counselor)

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. 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
A supplemental course in health science to provide a study of current concepts and problems in health science. Specific topics will be announced in the schedule of classes. 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 healing from the perspectives of different cultures and healing systems. Many healing therapies, systems and traditions will be explored in order to discover the connections between mind, body, spirit and emotions. Many healing approaches will be covered including traditional Chinese medicine, personality theory of disease, shamanic healing herbs and plant medicine, Ayurveda and the chakra system, music therapy, art therapy, and conventional Western medicine. 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-help, 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. CSU

HSCI-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 beyond courses offered.
An opportunity for advanced students to study special interests under the direction of faculty. CSU

HSCI-299  Student Instructional Assistant
.5-3 units SC
• May be repeated three times
• Variable hours
• Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.
Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

HISTORY – HIST
Social Sciences Division
Lyn Krause, Dean
Faculty Office 134
925-685-1230 ext. 2518

Possible career opportunities
The study of history contributes to cultural literacy and develops critical thinking and other useful skills for a broad range of careers including education, public service and law. Most career options require more than two years of college study.

HIST-120  History of the United States Before 1877
3 units SC
• 54 hours lecture per term
• 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. 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 opera-
tion 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 inter-
national role of the United States during the 20th century.
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 or equivalent
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 under-
standing 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
The course is a survey of the history of California, includ-
ing 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, politi-
cal, economic and cultural forces in the growth of modern
California with special emphasis on the state's ethnic diver-
sity. 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
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 com-
nunities, as well as people of European, African, Asian,
and Native descent. The impact of U.S. attitudes and poli-
cies 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
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 contribu-
tions to the construction of the American national charac-
ter. 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
This course is a survey of the United States from the per-
spective of African Americans, comparing the African
experience with the experiences of Europeans, Native
Americans, Asian Americans and Hispanics. Part of the
course will be devoted to the U.S. government and the
Constitution, the California government and Constitution,
and other constitutional models for comparison and con-
trast. The course will examine the early African presence in
America, the origins of the slave trade, and explore politi-
cal, 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
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 his-
tory of African American economic, cultural, institutional,
political, and protest traditions from the post-Civil War
period to the present. It also includes African American
interaction with national, California state and local
governments, especially with respect to the California
Constitution. CSU, UC (credit limits may apply to UC - see
counselor)
HIST-129  History of Asians and Pacific Islanders in the United States

3 units  SC

• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent

An historical survey of the United States from 1840 to the present, with an emphasis on the Asian and Pacific Islander experience. The course focuses on the major periods of national development such as the Civil War, Reconstruction, Industrialization, Age of Reform, Great Depression, World Wars, Cold War and Vietnam, and Age of Conflict and Reform. Within this broad context, the course will also examine the perspective, developments, increasing diversity of ethnic groups, and contributions of Asians and Pacific Islanders in the United States with an emphasis on California. CSU, 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

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 or equivalent
• Note: Each of the four sections of HIST 134 may be devoted to any one of the four available tours. Students may choose one of the following: The California Missions: Myth and Reality; In Pursuit of Jack London; Historic Sacramento; or WWII in the East Bay. May be repeated three times provided topics differ.

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 classes 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 or equivalent

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 or equivalent

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. 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. CSU, UC

HIST-150  History of East Asia (to 1600)

3 units  SC

• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent

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 or equivalent
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
.3-4 units SC
- May be repeated three times
- Variable hours
A supplemental course in history to provide a study of current concepts and problems in history and related substantive areas. Specific topics will be announced in the schedule of classes. CSU

HIST-160 British Life and Culture
3 units SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
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 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-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-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 students to study special interests under direction of the faculty. CSU

HIST-299 Student Instructional Assistant
.5-3 units SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.
Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

HORTICULTURE - HORT

Biological and Health Sciences Division
Dennis Smith, Dean
Science Center Building 102
925-685-1230 ext. 2442

Possible career opportunities
The horticulture program prepares students for numerous state licenses and industry certificates. State licenses include landscape contractor and pest control operator. Industry certifications include: nursery person, arborist, landscape technician, maintenance technician, and irrigation designer. Career choices in horticulture include: nursery technician, propagator, plant breeder, nursery manager, greenhouse grower, greenhouse manager, garden center manager, arborist/tree worker, 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.
Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

Certificates 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 higher. Required courses are available in the evening and on weekends.

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 higher. 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 170 Landscape Drafting 3
HORT 171 Landscape Construction 3

plus at least 3 units from:
HORT 174 Landscape Design 3
HORT 298 Independent Study 0.5-3

total minimum required units 25

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 higher. 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 170 Landscape Drafting 3
HORT 174 Landscape Design 3

plus at least 3 units from:
HORT 150 Selected Topics in Horticulture 0.3-4

Certificate of achievement - Landscape design
This program prepares students for the 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 higher. 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 170 Landscape Drafting 3
HORT 174 Landscape Design 3

plus at least 3 units from:
HORT 150 Selected Topics in Horticulture 0.3-4

**For students with less than one year of full-time industry work experience.

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 higher. 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 170 Landscape Drafting 3
HORT 174 Landscape Design 3

plus at least 3 units from:
HORT 150 Selected Topics in Horticulture 0.3-4

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 higher. 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 170 Landscape Drafting 3
HORT 174 Landscape Design 3

plus at least 3 units from:
HORT 150 Selected Topics in Horticulture 0.3-4

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 higher. 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 170 Landscape Drafting 3
HORT 174 Landscape Design 3

plus at least 3 units from:
HORT 150 Selected Topics in Horticulture 0.3-4
plus at least 3 units from:
HORT 141L Tree Identification Laboratory .............. 1
HORT 143L Shrub Identification Laboratory .............. 1
HORT 147L Annuals and Perennials Identification Laboratory ............................................. 1
HORT 150 Selected Topics in Horticulture .............. 0.3-4
HORT 298 Independent Study .................................... 0.5-3
total minimum required units 31

Certificate of achievement - Landscape maintenance

Students are prepared for positions in the landscape maintenance field and for the California Landscape Contractors Association's CLTM examination. Elements of the program will also assist students preparing for the California Association of Nurseryperson's certification examination.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a "C" grade or higher. Required courses are available in the evening and on weekends.

required courses
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 177 Landscape Irrigation Installation ............... 3
HORT 179 Arboriculture ............................................. 3

plus at least 3 units from:
HORT 170 Landscape Drafting ................................... 3
HORT 170L Arboriculture Laboratory ........................... 3
HORT 298 Independent Study .................................... 0.5-3

total minimum required units 31

recommended courses
For students with less than one year of full-time industry work experience.
HORT 141L Tree Identification Laboratory .............. 1
HORT 143L Shrub Identification Laboratory .............. 1
HORT 147L Annuals and Perennials Identification Laboratory ............................................. 1

HORT-091NC Adaptive Horticulture - Nursery Skills and Practices
0 unit
- 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 DVC garden and in the adaptive horticulture nursery where they will learn pre-vocational and vocational training skills associated with nursery production in the nursery and in the garden. This is an open entry/open exit course.

HORT-092NC Adaptive Horticulture - Landscape Skills and Practices
0 unit
- 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 prevocational and vocational training skills for a garden, residential, and commercial setting.

HORT-110 Introduction to Horticulture
4 units SC
- 54 hours lecture/54 hours laboratory per term
- Recommended: Eligibility for ENGL 122 or equivalent

Introduction to horticulture explores the biology and economics of growing and care for plants. The course covers the breadth of basic horticulture practices and the biological and environmental principles on which they are based. 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 and eligibility for ENGL 122 or equivalent

Terminology used in the identification of plants: terms relating to roots, stems, leaves, flowers and fruit used in all plant identification courses and in introduction to Horticulture. 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
1.5 units  SC
- 18 hours lecture/36 hours laboratory per term
- Recommended: HORT 110 and eligibility for ENGL 122 or equivalents

An overview course designed to acquaint students with the artificial and unsettled 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 and eligibility for ENGL 122 or equivalents
- Note: This course meets the plant certification for California Association for Nurserymen; California Landscape Contractor’s Licensing and satisfies International Society of Arboriculture Continuing Education units

Taxonomic and nomenclatural identity, habits of growth, liabilities, and geographical origin of landscape trees: native and exotic. Focus on tree valuation, landscape use, and structural analysis of species from nursery stock to mature specimens. CSU

HORT-141L  Tree Identification Laboratory
1 unit  SC
- May be repeated once
- 54 hours laboratory per term
- Recommended: HORT 110 or equivalent
- Note: This course 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 arboreta. Planting site analysis compared to tree candidate requirements are linked to standard arboricultural rating systems. CSU

HORT-143  Shrub Identification
3 units  SC
- 54 hours lecture per term
- Recommended: HORT 110 and HORT 140 and eligibility for ENGL 122 or equivalents
- 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

Taxonomy, identity, growth habits, landscape values and nativities of shrubs, naive and exotic, used in the urban landscape. Emphasis on contemporary and historical landscape design with shrubs, from maritime to continental environments. CSU

HORT-143L  Shrub Identification Laboratory
1 unit  SC
- May be repeated once
- 54 hours laboratory per term
- Recommended: HORT 110 or equivalent
- Note: This course satisfies California Association of Nurserymen’s continuing education requirements for members

Field identification of shrubs, native and exotic. Cultural care requirements, landscape design criteria, and functional values. Field outings to local gardens and arboreta and parks. Introduction and identification of shrubs species less commonly seen in Mediterranean climate setting. CSU

HORT-145  Ground Covers and Vines Identification
3 units  SC
- 54 hours lecture per term
- Recommended: HORT 110 and eligibility for ENGL 122 or equivalents
- Note: This course meets the plant certification requirements for California Association of Nurserymen and current guidelines for State of California Landscape Contractors Association

Taxonomy identity, habits of growth, cultural requirements and geographical origin of ground covers and vines, native and exotic, used in the urban landscape. Analysis and evaluation of local landscape settings that appropriately support ground cover species. Aerial and edaphic requirements of 180 species introduced and discussed. CSU

HORT-147  Annuals and Perennials Identification
3 units  SC
- May be repeated once
- 54 hours lecture per term
- Recommended: HORT 110 and eligibility for ENGL 122 or equivalents
- 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
• May be repeated once
• 54 hours laboratory per term
• Recommended: HORT 110 or equivalent
Field identification of annuals and perennials, native and exotic. Cultural requirements, landscape design criteria, and the functional values. Field outings to local gardens and arboreta. CSU

HORT-148  California Native Plants
1 unit    SC
• May be repeated three times
• 54 hours laboratory per term
• Note: Trip location varies for each course offering. Multiple day field trips to select California vegetation environments are taken to record relevant plant and habitat data.
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. The focus of this offering is the assimilation of more than 200 native species into the design portfolio of horticulture students for implementation in local landscapes. 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 classes. CSU

HORT-160  Plant Propagation
1.5 units    SC
• 18 hours lecture/36 hours laboratory per term
• Recommended: HORT 110 and eligibility for ENGL 122 or equivalents
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 and eligibility for ENGL 122 or equivalents
• Note: This course meets the California State Pest Control Advisor, California Association of Nurserymen, and International Society of Arboriculture Continuing Education Units (CEU) license certification for CEU’s necessary for pest control operators and advisors
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, manufacturing 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 and eligibility for ENGL 122 or equivalents
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 and Management Laboratory
1 unit    SC
• 54 hours laboratory per term
• Recommended: HORT 110 and HORT 164 (should be taken concurrently) and eligibility for ENGL 122 or equivalents
This is a laboratory unit supplementing the Soil Science and Management course HORT 164. Field trips, demonstrations and experiments will deepen the methodological knowledge of students in this field. CSU
HORT-165  New Plant Introductions  
3 units  SC  
• 54 hours lecture per term  
• Recommended: HORT 110 and eligibility for ENGL 122 or equivalents  
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: HORT 160 and eligibility for ENGL 122 or equivalents  
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: HORT 160 and eligibility for ENGL 122 or equivalents  
A course on the principles and practices of container production. This course is designed to help student learn greenhouse management, the scheduling of spring and summer plant production and the marketing of spring and summer grown containerized nursery stock. CSU

HORT-170  Landscape Drafting  
3 units  SC  
• 54 hours lecture per term  
• Recommended: HORT 110 and eligibility for ENGL 122 or equivalents  
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-174  Landscape Design  
3 units  SC  
• 54 hours lecture per term  
• Recommended: HORT 170 and eligibility for ENGL 122 or equivalents  
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 and eligibility for ENGL 122 or equivalents  
• 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 HORT 179 (should be taken concurrently) and eligibility for ENGL 122 or equivalents  
Designed for new horticulture students and professionals alike, this course introduces the concepts and features required to prune woody species for aesthetics and health. Topics include but are not limited to: tree anatomy and structure, positioning and timing of limb removal, crown reduction and rejuvenation techniques, as well as fruit stimulation of orchard species. This course will enable students to eventually certify as arborist or tree workers. It also includes exposure to climbing techniques, knots, safety, chainsaw operation, and equipment maintenance. Course follows study guide prepared by National Arborist Association and the International Society of Arboriculture. CSU
HORT-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 the faculty. CSU

HORT-299  Student Instructional Assistant
.5-3 units  SC
• May be repeated three times
• Variable hours
• Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

HUMANITIES – HUMAN

Applied and Fine Arts
Michael Almaguer, Dean
Humanities Building 112 and 113
925-685-1230 ext. 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.

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

Associate in arts in letters and science degree - area of emphasis - Humanities

This degree program is designed for students who wish to study a broad range of college courses and complete additional coursework in an “Area of Emphasis”. Programs with an area of emphasis are designed to allow students to engage in an interdisciplinary study of a subject that is not limited to a single discipline. Many areas of emphasis programs provide preparation for study at four-year institutions.

The humanities area of emphasis is comprised of courses that integrate the different arts: music, dance, visual arts, architecture, literature, drama, philosophy and history. The area of emphasis provides a well rounded and rich background in the creative and intellectual expression of major world civilizations, intellectual and cultural movements, and individual works of creative expression. Humanities students develop skills in artistic analysis, aesthetic judgments, and other modes of critical thinking. Students develop the ability to view cultural material from multiple perspectives, appreciate and evaluate diverse forms of cultural expression, and understand the criticism and theory regarding major artistic works, styles, forms and movements.

DVC Humanities students who intend to transfer must consult with a program advisor or counselor to ensure that the requirements for transfer to four-year institutions of their choice are met. Students who intend to transfer are advised to select either General Education Option 2 (IGETC) or Option 3 (CSU Breadth). General Education Option 1 (DVC General Education) is appropriate for students who do not intend to transfer.

To earn an associate in arts degree with an area of emphasis in humanities, students must complete each required course with a “C” grade or higher, and complete all graduation requirements as listed in the catalog. Degree requirements can be completed by attending classes in the day, the evening, or both. Some courses may satisfy both an area of emphasis and other graduation requirements, however the units are only counted once.

Area of emphasis requirements

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>HUMAN 105 Introduction to Humanities: Arts and Ideas...</td>
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<tr>
<td>HUMAN 108 The Roots of Hell</td>
<td>3</td>
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<tr>
<td>HUMAN 110 Introduction to Humanities: Ancient Civilizations (to 500 A.D.)</td>
<td>3</td>
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<tr>
<td>HUMAN 111 Introduction to Humanities: Middle Ages and Renaissance (500 A.D. – 1700 A.D.)</td>
<td>3</td>
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<tr>
<td>HUMAN 112 Introduction to Humanities: The Modern World (1700-present)</td>
<td>3</td>
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<tr>
<td>HUMAN 115 Introduction to Humanities: The American Multicultural Experience</td>
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<tr>
<td>HUMAN 116 The Arts and Culture of Asia</td>
<td>3</td>
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<tr>
<td>HUMAN 118 Film, Fiction, and Criticism</td>
<td>3</td>
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<tr>
<td>HUMAN 123 American Popular Culture</td>
<td>3</td>
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<tr>
<td>PHIO 120 Introduction to Philosophy</td>
<td>3</td>
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<tr>
<td>PHIO 122 Introduction to Ethics</td>
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</tbody>
</table>
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; an 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 Indian, Asian-American, and Latino-American. This course will examine contemporary creative works in relation to their historical 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/Transcycasia. 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 examine 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-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

**HUMAN-299 Student Instructional Assistant**

.5-3 units SC  
- May be repeated three times  
- Variable hours  
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

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**ITALIAN – ITAL**

Students with prior foreign language instruction should check with a language teacher regarding proper placement in foreign language courses. The following system is generally used to determine the appropriate term of college work based on high school language: two years equal one college term; three years equal two college terms; four years equal three college terms.

Applied and Fine Arts
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**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.
Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

Certificate of achievement
Italian

Certificate of achievement - Italian
This certificate of achievement was created to give students the opportunity to show potential employers in this country and in other countries that the student has completed a certain number of courses in Italian and prepares students with an intermediate to advanced knowledge of Italian and familiarizes them with the culture of Italy.

This certificate of achievement provides students, prospective employers and others with documented evidence of persistence and academic accomplishment in the language. The certificate requires completion of at least 13 units from the following lists of courses which must be completed with a grade of “C” grade or higher.

List A
ITAL 120 First Term Italian.......................... 5
ITAL 121 Second Term Italian...................... 5
ITAL 220 Third Term Italian.......................... 5
ITAL 221 Fourth Term Italian....................... 5
ITAL 230 Fifth Term Italian.......................... 3
ITAL 231 Sixth Term Italian......................... 3

List B
ITAL 121 Second Term Italian...................... 5
ITAL 155 First Term Conversational Italian........ 3
ITAL 156 Second Term Conversational Italian........ 3
ITAL 157 Third Term Conversational Italian........ 3
ITAL 220 Third Term Italian.......................... 5
ITAL 221 Fourth Term Italian....................... 5

total minimum required courses 13

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 as well as a continued examination of the culture of Italy. 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 classes. 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-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. CSU, UC (credit limits may apply to UC - see counselor)

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. 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. 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

ITAL-299 Student Instructional Assistant
.5-3 units SC
• May be repeated three times
• Variable hours
• Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.
Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

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.

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

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.

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

Certificate of achievement
Japanese

Certificate of achievement - Japanese
This certificate of achievement was created to give students the opportunity to show potential employers in this country and in other countries that the student has completed a certain number of courses in Japanese and prepares students with an intermediate to advanced knowledge of Japanese and familiarizes them with the culture of Japan.

This certificate of achievement provides students, prospective employers and others with documented evidence of persistence and academic accomplishment in the language. The certificate requires completion of at least 13 units from one of the following lists of courses which must be completed with a grade of “C” grade or higher.

List A
JAPAN 120 First Term Japanese........................................5
JAPAN 121 Second Term Japanese.....................................5
JAPAN 220 Third Term Japanese.........................................5
JAPAN 221 Fourth Term Japanese.......................................5
**List B**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>JAPAN 145</td>
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<td>First Trimester Japanese</td>
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<tr>
<td>JAPAN 146</td>
<td>3</td>
<td>Second Trimester Japanese</td>
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<td>JAPAN 147</td>
<td>3</td>
<td>Third Trimester Japanese</td>
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<tr>
<td>JAPAN 220</td>
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<td>JAPAN 221</td>
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**List C**

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<tr>
<td>JAPAN 120</td>
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<tr>
<td>JAPAN 130</td>
<td>3</td>
<td>First Term Kanji</td>
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<tr>
<td>JAPAN 131</td>
<td>3</td>
<td>Second Term Kanji</td>
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<tr>
<td>JAPAN 132</td>
<td>3</td>
<td>Third Term Kanji</td>
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</tbody>
</table>

**Total minimum required units**: 13

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**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

This course is an introduction to the Japanese language. Using realistic situations, students will learn proper pronunciation, vocabulary, basic grammar, sentence structure, two types of Japanese characters (Hiragana and Katakana) and realistic aspects of Japanese culture. Basic Kanji characters will be introduced. 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

This course is designed for those who have taken Japanese 120 or who have the equivalent knowledge and skills. Students will further develop their ability to speak, read and write Japanese. They will deepen their knowledge of Japanese culture and society and improve their communication skills. An increasing number of Kanji characters will be introduced. 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 intermediate-level essays and understanding the pamphlets for travel, train timetables, and newspaper headlines. The course will cover up to 500 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 345 characters. CSU

**JAPAN-145  First Trimester Japanese**

3 units SC

- 54 hours lecture/18 hours laboratory by arrangement per term

- **Recommended**: JAPAN 145 or equivalent

This course is an introduction to the Japanese language. Using realistic situations to learn basic language communication skills, students will learn proper pronunciation, vocabulary, basic grammar, sentence structure, two types of Japanese characters (Hiragana and Katakana) and realistic aspects of Japanese culture. The course is 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 146 or equivalent

This course continues to develop essential vocabulary words for communicative fluency, emphasizing speaking and listening. Writing, reading and culture are taught as well. Additional Kanji characters will be introduced. The course is 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. Japanese customs and traditions will be explored further. The course is 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 classes. CSU  

JAPAN-220  Third Term Japanese  
5 units SC  
• 90 hours lecture/18 hours laboratory by arrangement per term  
• Recommended: JAPAN 121 or equivalent  

This course develops the fluency in speaking, listening, reading, and writing skills in Japanese. Students will learn both formal and informal speech styles, expand conversational skills and build up vocabulary with 150 new Kanji characters. A variety of contemporary and traditional Japanese cultural elements will be explored. CSU, UC  

JAPAN-221  Fourth Term Japanese  
5 units SC  
• 90 hours lecture/18 hours laboratory per term  
• Recommended: JAPAN 220 or equivalent  

The course further develops the fluency in speaking, listening, reading, and writing skills in Japanese. Students will extend their ability to communicate effectively and properly in various real-life situations, learn complex grammatical structures, and increase vocabulary using a significant number of Kanji characters. Further study of contemporary and traditional Japanese cultural elements will be carried out. CSU, UC  

JAPAN-245  Fourth Trimester Japanese  
3 units SC  
• 54 hours lecture per term  
• Recommended: JAPAN 147 or equivalent  

This course continues to develop the fluency to use the language appropriately in various conversational contexts. Additional emphases are placed on communication skills, and reading and writing. An increased number of Kanji characters are introduced with more detailed information about character components and word formation. Contemporary and traditional Japanese cultural elements will be explored. 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  

JAPAN-299  Student Instructional Assistant  
.5-3 units SC  
• May be repeated three times  
• Variable hours  
• Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.  

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU  

JOURNALISM – JRNAL  

English Division  
Ellen Kruse, Interim Dean  
Faculty Office 136  
925-685-1230 ext. 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. Visit the Inquirer at www.theinquireronline.com
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. CSU, UC

JRNAL-120  Basic Newspaper Techniques  
3 units  SC  
• 54 hours lecture per term  
• Recommended: ENGL 118 or equivalent  
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. CSU

JRNAL-126  Newspaper Production Laboratory  
1-3 units  SC  
• May be repeated three times  
• Variable hours  
• Recommended: ENGL 118 or equivalent  
• 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 or equivalent  
• 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

LEARNING SKILLS – LRNSK  

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

Possible career opportunities  
Diablo Valley College’s learning skills course offerings provide support to students with disabilities who are pursuing their academic and career objectives. Courses are designed to determine students’ eligibility for services, and to enhance student success in academic and career coursework.

LRNSK-049  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-056 Adaptive Computer Technology**

0.5–1.5 units 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 limit them in mainstream computer application classes. No computer skills or knowledge are required.

This course provides individualized and small-group instruction for students with disabilities in the use of computer-based assistive technology which supports students’ learning styles and/or physical needs. This process will be facilitated by the use of speech recognition programs, text-to-speech software, and adaptive keyboarding strategies as appropriate.

**LRNSK-065 Perspectives on Disability: Developing Self-Advocacy Skills**

1 unit LR
- Non degree applicable
- 18 hours lecture per term
- Note: For more information, see Disability Support Services counselor

This course is designed to provide information to students with disabilities regarding their rights, responsibilities, and obligations in receiving support services in both the college and employment settings. Students will learn about the federal laws (Americans with Disabilities Act (ADA) and Section 504 of the Federal Rehabilitation Act) that afford students/employees with disabilities the right to academic adjustments and accommodations while taking college course work and in employment settings. The emphasis of the course will be developing self-advocacy skills related to requesting, utilizing, and managing their academic adjustments (e.g., test accommodations, books in an alternative format, notetakers) and accommodations (e.g., interpreters for the deaf, brailled materials, redistribution of job duties). Course content will be taught through lectures, role playing, class discussions, video presentations, and guest speakers.

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**LIBRARY STUDIES – L AND LS**

Library and Learning Resources Division
Ann Patterson, Dean
Library Building 219
925-685-1230 ext. 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 technology: library technician, library assistant, library paraprofessional, instructional media assistant, information specialist, library media specialist, and website editor.

**Program level student learning outcomes**

A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: [www.dvc.edu/slo](http://www.dvc.edu/slo) for the most current information.

**Associate in science degree**

Library technology

**Certificate of achievement**

Library technology

**Associate in science degree - Library technology**

The associate in science degree in library 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 technology.

To earn the degree, students must complete each course used to meet a major requirement with a “C” grade or higher, maintain an overall GPA of 2.5 or higher in the coursework required for the major and complete all graduation requirements as listed in the catalog. Certain courses may satisfy both major and other graduation requirements; however the units are only counted once. With department chairperson approval, other course substitutions are possible for use in completing the program.
**Certificate of achievement - Library technology**

This certificate program prepares students for employment in the dynamic field of library and information services. The skills learned in this program may be used in public, school, academic, and corporate libraries, as well as in other jobs or businesses requiring information management skills. If you like working with people, books and information, consider a career in library technology.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or higher and maintain an overall GPA of 2.5. With department chairperson approval, other course substitutions are possible for use in completing the program.

### Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>L 100</td>
<td>Introduction to a Career in Library Technology</td>
<td>1</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>3</td>
</tr>
<tr>
<td>L 105</td>
<td>Reference and Research Services: Tools and Techniques</td>
<td>3</td>
</tr>
<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>
<tr>
<td>COOP 170</td>
<td>Occupational Work Experience Education</td>
<td>1-4</td>
</tr>
<tr>
<td>COOP 170A</td>
<td>Internship in Occupational Work Experience Education</td>
<td>1-4</td>
</tr>
</tbody>
</table>

### Plus at least 2 Units From:

- COOP 170 Occupational Work Experience Education
- COOP 170A Internship in Occupational Work Experience Education

### Plus 6 Units from Groups 1 and 2. A Minimum of 2 Units Must be From Group 1:

#### Group 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 177</td>
<td>Children's Literature</td>
<td>3</td>
</tr>
<tr>
<td>L 109</td>
<td>Delivering Library Services: Issues, Theory and Techniques</td>
<td>2</td>
</tr>
<tr>
<td>L 111</td>
<td>Storytelling</td>
<td>2</td>
</tr>
<tr>
<td>L 112</td>
<td>Internet Skills for Library Personnel</td>
<td>1</td>
</tr>
<tr>
<td>L 114</td>
<td>Developing Web Pages for Library Information</td>
<td>1</td>
</tr>
<tr>
<td>L 150</td>
<td>Topics in Library and Information Technology</td>
<td>2</td>
</tr>
<tr>
<td>LS 130</td>
<td>Internet and Online Research Technology</td>
<td>1</td>
</tr>
<tr>
<td>LS 150</td>
<td>Topics in Library Studies</td>
<td>3-4</td>
</tr>
</tbody>
</table>

#### Group 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTDM 110</td>
<td>Digital Imaging Process and Technique I</td>
<td>1.5</td>
</tr>
<tr>
<td>ARTDM 171</td>
<td>Web Design</td>
<td>3</td>
</tr>
<tr>
<td>BUSMG 121</td>
<td>Practices and Concepts of Supervision</td>
<td>3</td>
</tr>
<tr>
<td>CIS 100</td>
<td>Microsoft Windows - Comprehensive</td>
<td>2</td>
</tr>
<tr>
<td>COMTC 110</td>
<td>Introduction to Computers and Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>COOP 170</td>
<td>Occupational Work Experience Education</td>
<td>1-4</td>
</tr>
<tr>
<td>COOP 170A</td>
<td>Internship in Occupational Work Experience Education</td>
<td>1-4</td>
</tr>
</tbody>
</table>

**Total Minimum Required Units: 19**

**Note:** The maximum number of units applicable to the program requirements in COOP 170 or COOP 170A is four.

### Certificate of achievement - Library technology

To assist students in planning their schedules, Diablo Valley College has prepared a list of required courses to be offered each term. This list is subject to change due to fiscal constraints and availability of staff and/or facilities, but it should help you in plan-
Scheduling your classes. 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 term. Verify offerings with program faculty, counselors and the online schedule of classes.

Library and information technology course sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Term</th>
<th>Units</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>L 100</td>
<td>1st term</td>
<td>1</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>L 103</td>
<td>2nd term</td>
<td>2</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>L 104</td>
<td>2nd term</td>
<td>3</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>L 105</td>
<td>3rd term</td>
<td>3</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>L 108</td>
<td>3rd term</td>
<td>1</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>LS 121</td>
<td>1st term</td>
<td>1</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>COOP 170 or 170A</td>
<td>3rd term</td>
<td>2-4</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Elective coursework</td>
<td>2nd-4th term</td>
<td>1-4</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

L-100 Introduction to a Career in Library Technology

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

An introduction to the dynamic field of library and information studies for paraprofessionals. This course explores various types of libraries and information centers, and the competencies needed for a successful career in the field as well as job opportunities in libraries and information centers. CSU

L-103 Access to Library Materials

2 units LR
- 36 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent

This course introduces students to the full array of access services in a variety of library settings. Special skills and competencies for paraprofessionals will be covered as they relate to providing and preserving quality access to library patrons. The course will also explore the philosophy of access services from a historical perspective and applied to a variety of current situations. CSU

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 the use of print and online information resources found in public, school, college and special libraries. Students learn effective techniques for assisting library patrons, and are provided opportunities for developing reference service skills. The class uses resources available through the Diablo Valley College library plus other commonly available resources. CSU

L-108 Acquisition of Library Materials

1 unit LR
- 18 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent

This course teaches library concepts and practices involving the selection, ordering and receiving of materials from the decision to purchase materials to their receipt, processing and distribution. Students will learn to use automated systems and other technology applications in the practice of selecting and de-selecting books. CSU

L-109 Delivering Library Services: Issues, Theory, and Techniques

2 units SC
- 36 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent

This course teaches oral and written communication skills and strategies essential to successful performance as a library paraprofessional. Communication within the organization, marketing, customer and community relations, and evaluation of services are covered. CSU
L-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 develop skills as storytellers in the library, classroom, home and other settings. The class will survey various types and formats of storytelling and provide practical experience in presenting and evaluating stories. CSU

L-112  Internet Skills for Library Personnel
1 unit  SC
• 18 hours lecture per term
• Recommended: L 103 or equivalent; eligibility for ENGL 122 or equivalent
This course teaches the use of the Internet in providing library and information services. The class is designed for library personnel whose responsibilities include using the Internet and other automated systems for work-related tasks such as reference, cataloging, acquisitions and other information management activities. Exploration of advanced searching techniques, user training and evaluation of online resources are included. CSU

L-114  Developing 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 in Library to provide a study of current concepts and problems in library technology. 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.

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 library at Diablo Valley College 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
The 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

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 ext. 2359

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 equivalent

This course will include in-depth coverage of precision measuring and inspection practices, advanced lathe and vertical milling machine operations and surface grinder operation. Thread theory, thread nomenclature and thread forming methods, and boring on lathes and vertical milling machines will be covered. Selection of metals and introductory metallurgy will be presented. Basic principles of Computer Numerical Control (CNC) machining will be introduced. CSU

MATEC-222  Introduction to Computer Numerical Control
3 units  LR
  •  18 hours lecture/90 hours laboratory per term
  •  Recommended: MATEC 120 or equivalent
  •  Note: Recommended: 1) Experience in lathe and vertical milling machines and their use; 2) Experience in using precision measuring tools

This course introduces students to Computer Numerical Control (CNC) machining including Computer Aided Design (CAD), Computer Aided Machining (CAM), software and G-code machine languages. Students will learn the design processes, geometry creation and 3D modeling needed for part creation. Students will take CNC programs and learn how to set up and operate CNC machines to fabricate parts. CSU

MATH

Math and Computer Science Division
Rachel Westlake, Dean
Math Building 267
925-685-1230 ext. 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.

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

Associate in arts degree
  Mathematics
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 higher and complete all graduation requirements as listed in the catalog. Certain courses may satisfy both major and a graduation requirement; however the units are only counted once.

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 minimum required units 18

A mathematics laboratory is open daily in the Learning Center where mathematics advisors are available to aid students.

MATH-050  Alternate Credit for Prealgebra with Arithmetic Review

4 units  P/NP
• May be repeated two times
• Non degree applicable
• 54 hours lecture/72 hours laboratory by arrangement per term
• Recommended: MATH 065 or equivalent
• Note: Students do not enroll directly in this course. Enrollment is limited to transfer by instructor.

This course is designed to allow students who are enrolled in MATH 075SP to receive non degree applicable credit for mastery of some but not all of the outcomes in MATH 075SP. In order to receive credit for MATH 050, students must enroll in MATH 075SP and make reasonable progress through the content.

MATH-051  Alternate Credit Elementary Algebra

4 units  P/NP
• May be repeated two times
• Non degree applicable
• 54 hours lecture/72 hours laboratory by arrangement per term
• Recommended: MATH 075 or equivalent
• Note: Students do not enroll directly in this course. Enrollment is limited to transfer by instructor.

This course is designed to allow students enrolled in MATH 110SP to receive credit for mastery of some but not all of the outcomes in MATH 110SP. In order to receive credit for MATH 051, students must enroll in MATH 110SP and make reasonable progress through the content.

MATH-052  Alternate Credit Intermediate Algebra

4 units  P/NP
• May be repeated two times
• Non degree applicable
• 54 hours lecture/72 hours laboratory by arrangement per term
• Recommended: MATH 110 or equivalent
• Note: Students do not enroll directly in this course. Enrollment is limited to transfer by instructor.

This course is designed to allow students enrolled in MATH 120SP to receive credit for mastery of some but not all of the outcomes in MATH 120SP. In order to receive credit for MATH 052, students must enroll in MATH 120SP and make reasonable progress through the content.

MATH-053  Alternate Credit College Algebra

3 units  P/NP
• May be repeated once
• Non degree applicable
• 54 hours lecture/72 hours laboratory by arrangement per term
• Recommended: MATH 120 or equivalent
• Note: Students do not enroll directly in this course. Enrollment is limited to transfer by instructor.

This course is designed to allow students enrolled in MATH 135SP to receive credit for mastery of some but not all of the outcomes in MATH 135SP. In order to receive credit for MATH 053, students must enroll in MATH 135SP and make reasonable progress through the content.

MATH-056  Arithmetic and Problem Solving

4 units  SC
• Non degree applicable
• 90 hours lecture/36 hours laboratory by arrangement per term
• Note: This course has a lab requirement (see hours by arrangement in course listing), representing a significant portion of your course grade. Labs require computer and internet access, but may be completed in any location with such access, on or off campus.

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/72 hours laboratory by arrangement per term  
- Recommended: MATH 065 or equivalent  
- Note: This course has a lab requirement (see hours by arrangement in course listing), representing a significant portion of your course grade. Labs require computer and internet access, but may be completed in any location with such access, on or off campus.

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**  
4 units  SC  
- Non degree applicable  
- 54 hours lecture/72 hours laboratory by arrangement per term  
- Recommended: MATH 065 or equivalent  
- Note: In this computer-assisted self-paced class, students study out of the textbook and online and take a combination of online and in-class exams. This course has a lab requirement (see hours by arrangement in course listing). The labs may require computer access. 50% of your lab hours must be completed in the DVC Math Lab, and the rest may be completed in any location with computer access, on or off campus. Students may choose to complete MATH 075SP in one semester, or take up to 4 semesters. MATH 075SP is equivalent to MATH 075; students who have completed MATH 075 will not receive credit for MATH 075SP.

This course is a computer-assisted self-paced class equivalent to MATH 075. Students will learn prealgebra, review arithmetic, and learn how to use both in their daily lives. Topics include 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-110  Elementary Algebra**  
4 units  SC  
- 90 hours lecture/36 hours laboratory by arrangement per term  
- Prerequisite: Placement through the assessment process or MATH 075 or MATH 075SP or equivalent  
- Note: This course has a lab requirement (see hours by arrangement in course listing). The labs will be assigned by your instructor and will be a significant portion of your course grade. The labs require computer and internet access, but may be completed in any location with such access, on or off campus.

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**  
4 units  SC  
- 54 hours lecture/72 hours laboratory by arrangement per term  
- Prerequisite: Placement through the assessment process or MATH 075 or MATH 075SP or equivalent  
- Note: In this computer-assisted self-paced class, students study out of the textbook and online and take a combination of online and in-class exams. This course has a lab requirement (see hours by arrangement in course listing). The labs may require computer access. 50% of your lab hours must be completed in the DVC Math Lab, and the rest may be completed in any location with computer access, on or off campus. Students may choose to complete MATH 110SP in one semester, or take up to 4 semesters. MATH 110SP is equivalent to MATH 110; students who have completed MATH 110 will not receive credit for MATH 110SP.

This course is a computer-assisted self-paced equivalent to MATH 110. 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-111  Study Skills Support for Elementary Algebra**  
1 unit  SC  
- May be repeated two times  
- 18 hours lecture per term  
- Co-requisite: MATH 110 or MATH 110SP or equivalent  
- Note: MATH 111 is designed for students currently enrolled in MATH 110 who want extra support and assistance with study skills. It is especially recommended for students who have previously attempted MATH 110 without success.

This course is an optional support course intended to supplement MATH 110: Elementary Algebra. Students will learn and implement study skills designed to help improve their performance in their Elementary Algebra course. Topics will include time management, note taking, memory techniques, studying for tests, test anxiety and math anxiety.
Mathematics

MATH-114  Geometry  
3 units  SC  
- 54 hours lecture/36 hours laboratory by arrangement per term  
- Prerequisite: Placement through the assessment process or MATH 110 or MATH 110SP or equivalent  
- Recommended: Eligibility for ENGL 116/118 or equivalent  
- Note: This course has a lab requirement (see hours by arrangement in course listing). The labs will be assigned by your instructor and will be a significant portion of your course grade. The labs require computer and internet access, but may be completed in any location with such access, on or off campus.  

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: Placement through the assessment process or MATH 110 or MATH 110SP or equivalent  
- Note: This course has a lab requirement (see hours by arrangement in course listing). The labs will be assigned by your instructor and will be a significant portion of your course grade. The labs require computer and internet access, but may be completed in any location with such access, on or off campus.  

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  
4 units  SC  
- 54 hours lecture/72 hours laboratory by arrangement per term  
- Prerequisite: Placement through the assessment process or MATH 110 or MATH 110SP or equivalent  
- Note: In this computer-assisted self-paced class, students study out of the textbook and online and take a combination of online and in-class exams. This course has a lab requirement (see hours by arrangement in course listing). The labs may require computer access. 50% of your lab hours must be completed in the DVC Math Lab, and the rest may be completed in any location with computer access, on or off campus. Students may choose to complete MATH 120SP in one semester, or take up to 4 semesters. MATH 120SP is equivalent to MATH 120; students who have completed MATH 120 will not receive credit for MATH 120SP.  

This course is a computer-assisted self-paced class equivalent to MATH 120. 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: Placement through the assessment process or MATH 120 or equivalent  
- Recommended: MATH 114 or equivalent  
- Note: This course has a lab requirement (see hours by arrangement in course listing). The labs will be assigned by your instructor and will be a significant portion of your course grade. The labs require computer and internet access, but may be completed in any location with such access, on or off campus.  

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. CSU

MATH-124  Mathematics for Liberal Arts  
3 units  LR  
- 54 hours lecture/36 hours laboratory by arrangement per term  
- Prerequisite: Placement through the assessment process or MATH 120 or 120SP or equivalent  
- Note: This course has a lab requirement (see hours by arrangement in course listing). The labs will be assigned by your instructor and will be a significant portion of your course grade. The labs require computer and internet access, but may be completed in any location with such access, on or off campus.  

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. CSU, UC (credit limits may apply to UC - see counselor)
Inequalities, nonlinear systems, conic sections. CSU, UC

MATH-135  College Algebra
3 units  LR
- 72 hours lecture/36 hours laboratory by arrangement per term
- Prerequisite: Placement through the assessment process or MATH 120 or 120SP or equivalent
- Note: This course has a lab requirement. The labs will be assigned by your instructor and will be a significant portion of your course grade. The labs require computer and internet access, but may be completed in any location with such access, on or off campus.
A study of functions and their graphs, including polynomial, rational, exponential, and logarithmic functions. Inequalities, nonlinear systems, conic sections. CSU, UC (credit limits may apply to UC - see counselor)

MATH-135SP  College Algebra - Self Paced
3 units  LR
- 54 hours lecture/72 hours laboratory by arrangement per term
- Prerequisite: Placement through the assessment process or MATH 120 or 120SP or equivalent
- Note: In this computer-assisted self-paced class, students study out of the textbook and online and take a combination of online and in-class exams. This course has a lab requirement. The labs may require computer access. 50% of your lab hours must be completed in the DVC Math Lab, and the rest may be completed in any location with computer access, on or off campus.
Students may choose to complete MATH 135SP in one semester, or take up to 4 semesters. MATH 135SP is equivalent to MATH 135; students who have completed MATH 135 will not receive credit for MATH 135SP.
This course is a computer-assisted self-paced class, equivalent to MATH 135. The topics include a study of functions and their graphs, including polynomial, rational, exponential, and logarithmic functions. Inequalities, nonlinear systems, conic sections. CSU, UC (credit limits may apply to UC - see counselor)

MATH-140  Tutor Training
.5-2 units  SC
- Variable hours
- Prerequisite: Placement through the assessment process or 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: Placement through the assessment process or MATH 120 or 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. CSU, UC (credit limits may apply to UC - see counselor)

MATH-150  Topics in Mathematics
.3-4 units  SC
- May be repeated three times
- Variable hours
- Formerly MATH 170
A supplemental course in mathematics to provide a study of current concepts and problems. Specific topics will be announced in the schedule of classes. CSU

MATH-151  Finite Mathematics
3 units  LR
- 54 hours lecture per term
- Prerequisite: Placement through the assessment process or MATH 120 or 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. CSU, UC

MATH-181  Finite Mathematics
3 units  LR
- 54 hours lecture per term
- Prerequisite: Placement through the assessment process or MATH 120 or 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. CSU, UC

MATH-182  Calculus for Management, Life Science and Social Science I
3 units  LR
- 72 hours lecture per term
- Prerequisite: Placement through the assessment process or MATH 135 or MATH 135SP or MATH 191 or equivalent
- Note: Not open to students who received credit for MATH 192 or equivalent
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. CSU, UC (credit limits may apply to UC - see counselor)
Mathematics

MATH-183 Calculus for Management, Life Science and Social Science II
3 units LR
- 72 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. CSU, UC (credit limits may apply to UC - see counselor)

MATH-191 Pre-Calculus
4 units LR
- 90 hours lecture per term
- Prerequisite: Placement through the assessment process OR MATH 120 or equivalent 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. CSU, UC (credit limits may apply to UC - see counselor)

MATH-192 Analytic Geometry and Calculus I
4 units LR
- 90 hours lecture per term
- Prerequisite: Placement through the assessment process OR MATH 191 or equivalent
- Recommended: Eligibility for ENGL 122 or equivalent
Students will learn the 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. CSU, UC (credit limits may apply to UC - see counselor)

MATH-193 Analytic Geometry and Calculus II
4 units LR
- 90 hours lecture per term
- Prerequisite: MATH 192 or equivalent
- Recommended: Eligibility for ENGL 122 or equivalent
Continuation of MATH 192. Further techniques and applications of integration in geometry, science and engineering. Continued work with algebraic and transcendental functions. Numerical methods in evaluation of the integral. Infinite series, solving differential equations, and applications of differential equations. Polar coordinates, parametric equations and conic sections. CSU, UC (credit limits may apply to UC - see counselor)

MATH-194 Linear Algebra
3 units LR
- 54 hours lecture per term
- Prerequisite: MATH 193 or equivalent
- Recommended: Eligibility for ENGL 122 or equivalent
Introduction to linear algebra including vector spaces, matrices, determinants, bases, and linear transformations. Techniques for solving systems of equations using matrices, and applications of linear transformations. CSU, UC

MATH-195 Discrete Mathematics
4 units LR
- 72 hours lecture per term
- Prerequisite: MATH 193 or equivalent
- Recommended: Eligibility for ENGL 122 or equivalent
- Note: MATH 193 or equivalent may be taken either as a prerequisite or concurrently
This course provides an introduction to propositional logic, induction, set theory, relations, and functions, counting and combinatorics, introduction to trees, graph theory, algorithms, and algebraic structures. The emphasis is on topics of interest to computer science students. 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. 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. 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
MATH-299 Student Instructional Assistant
.5-3 units SC
• May be repeated three times
• Variable hours
• Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

MUSIC – MUSIC
Applied and Fine Arts Division
Michael Almaguer, Dean
Humanities Building 112 and 113
925-685-1230 ext. 2312

Possible career opportunities
Music prepares students for careers as performers, teachers, composers, historians, arts administrators, and more. Career options include: conductor, arranger, film scorer/composer, music business/manager, music editor, music supervisor/director, songwriter, transcriber, editor (print music publishing), choir director, midi engineering, 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.

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

Certificate of achievement
Music industry studies

Certificate of achievement - Music industry studies
This certificate program prepares students for a career in the music industry. The program has an entrepreneurial focus emphasizing an industry trend requiring artists to be responsible for complete project development. The program is designed to produce well-rounded music industry professionals capable of all aspects of the music production process including recording, marketing, and distribution. The same skill-set also prepares students for careers in specialized areas of the music industry such as digital audio workstation operator, recording engineer, producer, composer, arranger, songwriter, sound designer, artist manager, distributor, and marketing representative.

To earn a certificate of achievement, students must complete the required courses with a “C” grade or higher. Required courses are available in the evening and during the day.

required courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<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>
<tr>
<td>MUSIC 175</td>
<td>Advanced Pro Tools</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 181</td>
<td>Introduction to the Music Industry</td>
<td>2</td>
</tr>
</tbody>
</table>

plus at least 9 units from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 124</td>
<td>Introduction to Music Production and Multi-track Recording</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 125</td>
<td>Advanced Music Production and Multi-track Recording</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 177</td>
<td>Introduction to Reason and ACID</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 182</td>
<td>Songwriting</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 270</td>
<td>Applied Projects in Music Industry Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

total minimum required units 23

MUSIC-100 Individual Studio Instruction
1.5 units LR
• May be repeated three times
• 27 hours lecture/6 hours lecture by arrangement/72 hours lab by arrangement per term
• Prerequisite: Audition required
• Note: In order to meet music major transfer requirements, 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, 223). Students are encouraged to meet with a counselor for further advisement.

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 during posted supervised practice hours, 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. CSU, UC

MUSIC-101 Beginning Guitar
1 unit SC
• May be repeated once
• 54 hours lecture per term
• Note: Student must provide an acoustic six-string guitar for use in the course

This course provides beginning six-string guitar instruction for general students as well as music students seeking to learn a second instrument. The course includes instruc-
tion in both folk and classical styles. 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 is necessary. CSU, UC

MUSIC-102 Intermediate Guitar
1 unit SC
- May be repeated once
- 54 hours lecture per term
- Recommended: MUSIC 101 or equivalent
- Note: Student must provide an acoustic six-string guitar for use in the course

This course provides intermediate six-string guitar instruction for students who have satisfactorily completed MUSIC 101 or the equivalent. Intermediate level classical solo repertoire as well as equivalent level popular music will be examined. Bar chords, intermediate level keys and arpeggios, transposition with and without a capo, strums, bass runs, and classical theory will be taught. CSU, UC

MUSIC-103 Guitar Ensemble
1 unit SC
- May be repeated once
- 54 hours lecture per term
- Recommended: MUSIC 102 or equivalent
- Note: Student must provide an acoustic six-string guitar for use in the course

This course focuses on the sight-reading, rehearsal, and performance of basic-level guitar ensemble literature. Basic note reading skills will be employed. Each member of the group will become a better musician through individual practice, listening, performance, and being an active part of the ensemble experience. CSU, UC

MUSIC-104 Advanced Guitar Ensemble
1 unit SC
- May be repeated once
- 54 hours lecture per term
- Recommended: MUSIC 103 or equivalent
- Note: Student must provide an acoustic six-string guitar for use in the course

This course focuses on the sight-reading, rehearsal, and performance of advanced guitar ensemble literature. Students will experience an expanded ensemble repertoire arranged for up to eight players featuring the music of Bach, Haydn, and other classical masters. Advanced note reading skills will be employed. Each member of the group will become a better musician through individual practice, listening, performance, and being an active part of the ensemble experience. 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 music styles. Clinics by guest artists and industry experts will be included. New music is studied each semester. CSU, UC

MUSIC-107 Live Popular Concert Performance and Production
1 unit SC
- May be repeated three times
- 54 hours lecture per term
- Formerly MUSPF 107

This course is a practical performance class in a professional venue environment. The focus of the course will be the fundamentals of integration 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

MUSIC-110 Introduction to Music Literature
3 units SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
- Formerly MUSLT 110

This course is an introduction to the experience of listening to music with an appreciation of its technical, stylistic, expressive, social and historical aspects. Audio recordings, audio-video recordings, and live performances are used to study the evolution of Western classical styles and genres including 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. CSU, UC
MUSIC-112 America's Music- A Multicultural Perspective
3 units SC
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent
• Formerly MUSLT 112
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

MUSIC-114 World Music
3 units SC
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent
• Formerly MUSLT 114
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

MUSIC-115 Music of the Middle East, North Africa, and South Africa
3 units SC
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent
• Formerly MUSLT 115
This course is a survey of Middle Eastern, North African, South Asian and Diaspora music cultures. Students will study popular and sacred musical traditions in both rural and urban contexts, and learn how music making relates to: religion, political, ethnic and national identity, popular culture, gender, and globalization. Historical, cultural, and social conditions for music will be explained, and current global issues and events will be demonstrated through evaluating the ways in which hybrid musical forms emerge when Middle Eastern, Western and other musical and cultural elements blend or conflict. CSU, UC

MUSIC-116 Native American Music
3 units SC
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent
• Formerly MUSLT 116
This course provides a survey of the numerous musical traditions, contributions and influences of the Native peoples in the Americas, including the Caribbean and Hawaii. Numerous traditions involving music will be presented that are affected by historical and current social and political conditions. Global issues and events will be explained through analyzing the ways in which new or hybrid musical forms emerge when Native, Western and other musical and cultural elements blend or come into conflict. Music will be explained as a symbol of identification and a tool of resistance in the process of cultural continuity and change. Perspectives will be drawn from ethnomusicology, the social sciences, multimedia, and Internet sources. CSU, UC

MUSIC-117 History of Rock and R & B
3 units SC
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent
• Formerly MUSLT 117
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)

MUSIC-118 History of Jazz
3 units SC
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent
• Formerly MUSLT 118
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)

MUSIC-120 Introduction to Music Skills
3 units SC
• 54 hours lecture 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
4 units SC
• 108 hours lecture per term
• Note: Credit by examination option available
This course is a study of the fundamentals of Western music applicable to both classical and popular styles. The study addresses notation; fundamental theoretical concepts; musicianship skills including sight signing, rhythmic training, ear training, dictation, and keyboard realization; and basic compositional skills. CSU, UC

MUSIC-123 Theory and Musicianship II
4 units SC
• 108 hours lecture per term
• Recommended: MUSIC 122 or equivalent
• Note: Credit by examination option available
This course is a study of harmonic techniques used in the Western Common Practice and addresses diatonic harmony, four-part voice leading, basic musical structures, basic composition, basic harmonic and structural analysis, and musicianship skills including sight singing, rhythmic training, ear training, dictation, and keyboard realization. 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
3 units SC
• 54 hours lecture/18 hours laboratory per term
• Recommended: MUSIC 124 or equivalent
This course extends basic practical music production and multi-track recording skills to include more complex projects, integration of acoustic and 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: MUSIC 120 or equivalent
This is the study of jazz theory and performance of jazz music with emphasis on improvisation and writing for the small jazz ensemble. Students will perform in class. CSU, UC

MUSIC-130 Jazz Workshop
1 unit SC
• May be repeated three times
• 54 hours lecture per term
• Prerequisite: Audition
• Formerly MUSPF 130
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 term. CSU, UC

MUSIC-134 Musical Theater Workshop
1 unit SC
• May be repeated three times
• 54 hours lecture per term
• Prerequisite: Audition
• Formerly MUSPF 134
This course provides training and experience for instrumentalists and vocalists in the production and presentation of a musical including comprehensive rehearsal and performance. CSU, UC

MUSIC-135 Vocal Jazz Ensemble
1 unit SC
• May be repeated three times
• 54 hours lecture per term
• Prerequisite: Audition
• Formerly MUSPF 135
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-136 Jazz Ensemble
1 unit LR
• May be repeated three times
• 54 hours lecture per term
• Prerequisite: Audition
• Formerly MUSPF 136
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 articula-
This course 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, listening and being an active part of the ensemble experience. CSU, UC

**MUSIC-150 Beginning Piano I**

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

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. The 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 lecture 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 lecture 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 lecture 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 lecture 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-162  Concert Choir
1 unit  SC
• May be repeated three times
• 54 hours lecture per term
• Prerequisite: Audition
• Formerly MUSPF 162
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

MUSIC-166  Chamber Singers
1 unit  SC
• May be repeated three times
• 54 hours lecture per term
• Prerequisite: Audition
• Formerly MUSPF 166
This course is for the study and public performance of ancient through contemporary chamber choir literature including music influenced by non-Western cultures. New literature is studied each semester. CSU, UC

MUSIC-168  Percussion Ensemble
1 unit  SC
• May be repeated three times
• 54 hours lecture per term
• Prerequisite: Audition
• Formerly MUSPF 168
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, listening and being an active part of the ensemble experience. 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, Broadway and other popular vocal styles. 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 Advanced 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, control surfaces, use of external signal processors, surround sound, and advanced mixing techniques. CSU

MUSIC-176 String Ensemble
1 unit LR
- May be repeated three times
- 54 hours lecture per term
- Prerequisite: Audition
- Formerly MUSPF 176

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, listening and being an active part of the ensemble experience. CSU, UC

MUSIC-177 Introduction to Reason and ACID
3 units SC
- May be repeated two times
- 36 hours lecture/54 hours laboratory per term
- Note: May be repeated once if different software is used

This course will provide the foundational skills needed to learn and function within the music production environments of Reason and ACID. These software applications represent a new generation of the stand-alone virtual studio. Topics will include music sequencing, digital audio recording, software synthesis and sampling, virtual effects, automation, signal flow, drum players and beat matching. CSU

MUSIC-180 Diablo Valley Masterworks Chorale
1 unit SC
- May be repeated three times
- 54 hours lecture per term
- Prerequisite: Audition
- Formerly MUSPF 180

This course is the study and performance of major works of the choral literature, along with practical experience in the operation of a community chorus. New literature is studied each term. CSU, UC

MUSIC-181 Introduction to the Music Industry
2 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 songwriting techniques. Students will learn to create their own musical compositions. Approaches to contemporary issues in song writing including development of melodic, lyrical, and rhythmic ideas will be studied. In addition, students will learn strategies for promoting their songs in the contemporary music marketplace as well as basic concepts of intellectual property right protection. CSU

MUSIC-190 Topics in Music
.3-.4 units SC
- May be repeated three times
- Variable hours

A supplemental course in music to provide a study of current topics in music. Specific topics will be announced in the schedule of classes. CSU
MUSIC-222 Theory and Musicianship III
4 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
4 units SC
- 108 hours lecture per term
- Recommended: MUSIC 222 or equivalent
This course is a study of advanced chromatic harmony, 20th century harmonic practices, large musical structures, style composition, harmonic, structural, and stylistic analysis, and musicianship skills including sight singing, rhythmic training, ear training, dictation, and keyboard realization. CSU, UC

MUSIC-236 Night Jazz Band
1 unit SC
- May be repeated three times
- 54 hours lecture per term
- Prerequisite: Audition
- Formerly MUSPF 236
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

MUSIC-240 Symphonic Band
1 unit LR
- May be repeated three times
- 54 hours lecture per term
- Prerequisite: Audition
- Formerly MUSPF 240
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

MUSIC-250 Piano Technique and Interpretation
1 unit SC
- May be repeated three times
- 54 hours lecture per term
- Recommended: MUSIC 151 or equivalent
This course provides group and one-on-one instruction in playing 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 tonal 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
1 unit SC
- May be repeated three times
- 54 hours lecture per term
- Prerequisite: Audition
This course is for the study and performance of piano music for multiple pianists and works for voice/instrument(s) and piano from the Western classical tradition. This course is held in a master class format and fulfills the ensemble recommendation for MUSIC 100. Solo instrumentalists and vocalists are encouraged to audition. 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/54 hours laboratory per term
- Recommended: MUSIC 124, 172, 174, 181 or equivalents

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-290  DVC Philharmonic Orchestra
1 unit SC
- May be repeated three times
- 54 hours lecture per term
- Prerequisite: Audition
- 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.
- Formerly MUSPF 290

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

MUSIC-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.

This course is for special studies in music under the guidance of the music faculty. CSU

MUSIC-299  Student Instructional Assistant
.5-3 units SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

MUSIC LITERATURE – MUSLT

See - Music - MUSIC

MUSIC PERFORMANCE – MUSPF

See - Music - MUSIC

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.

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 program and majors offered at DVC and other colleges.

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)
Nutrition

**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 like diet planning to optimize physical performance; diet analysis; energy systems and metabolism; efficiency of nutritional ergogenic; 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**  
3-4 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 or equivalent

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. CSU, UC (credit limits may apply to UC - see counselor)

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**OCEANOGRAHY – OCEAN**

Biological and Health Sciences Division  
Dennis Smith, Dean  
Science Center 102  
925-685-1230 ext. 2359

**Possible career opportunities**

The diverse range of subjects examined and the multi-disciplinary approach taken within the oceanography program prepares students for a variety of career paths. Courses focus on biological, physical, geological and chemical aspects of oceanography. Many oceanographers are employed as researchers and/or educators by public and private research institutions, universities, and colleges. Students graduating with degrees in oceanography or aquatic science fields may work as laboratory or field technicians; water monitoring specialists; for environmental protection, consulting and nonprofit firms; as observers aboard fishing vessels; or in the natural resource management fields. Limited numbers are employed to work with marine animals at aquariums, theme parks, or research facilities. Most career options are likely to require more than two years of college study.

**OCEAN-101  Fundamentals of Oceanography**  
3 units  SC  
- 54 hours lecture per term  
- Recommended: Eligibility for ENGL 122 or equivalent  
- Note: This course does not include a laboratory. Students requiring or wanting a laboratory to accompany this course should enroll in OCEAN 102 (formerly OCEAN 110).  
- Formerly OCEAN 109

This course is an introduction to the geological, chemical, physical and biological aspects of the world’s oceans and the interactions between these different aspects. Lecture topics will include (but are not limited to): The history of oceanography; historic and modern oceanographic instruments, methods of sampling and analysis; plate tectonics and marine geology; historic and modern uses of charts and navigational techniques; the marine-land interface; ecological problems of the local bay, estuary, delta and state wide water resources; oceans’ roles as a dominant influence 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, aqua cultural techniques and practices, and preservation of marine environments; and the deep sea; properties, animals and adaptations. The subject is multi-disciplinary both in regard to the variety of aspects studied and the methods of study utilized. CSU, UC

**OCEAN-102  Fundamentals of Oceanography with Laboratory**  
4 units  SC  
- 72 hours lecture/36 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-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 classes. CSU

**OCEAN-299 Student Instructional Assistant**

.5-3 units  SC  
- May be repeated three times  
- Variable hours  
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

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**PERSIAN – PERSN**

Students with prior foreign language instruction should check with a language teacher regarding their proper placement in foreign language courses. The following system is generally used to determine the appropriate term of college work based on high school language: two years equal one college term; three years equal two college terms; four years equal three college terms.

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Applied and Fine Arts Division  
Michael Almaguer, Dean  
Humanities Building 112 and 113  
925-685-1230 ext. 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.

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**PERSN-120 First Term Persian**

5 units  SC  
- 90 hours lecture/18 hours laboratory by arrangement per term  

This is a basic beginning course in understanding, speaking, reading, and writing Persian. It offers a balanced approach to the language and culture. Basic communicative functions and structures are introduced, as well as a basic exploration of the culture, history and geography of the Persian-speaking world. CSU, UC

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**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
**Persian**

**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 classes. CSU

**PERSN-155  First Term Conversational Persian**

3 units SC  
- May be repeated once  
- 54 hours lecture/18 hours laboratory by arrangement 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/18 hours laboratory by arrangement 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/18 hours laboratory by arrangement 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

**PERSN-299  Student Instructional Assistant**

.5-3 units SC  
- May be repeated three times  
- Variable hours  
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

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**PHILOSOPHY – PHILO**

Applied and Fine Arts Division  
Michael Almaguer, Dean  
Humanities Building 112 and 113  
925-685-1230 ext. 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. 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. 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. 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 classes. 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-Socrates, Plato, and Aristotle, and of the Hellenistic and Medieval periods. 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. 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

PHILO-299 Student Instructional Assistant
.5-3 units SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.
Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

PHOTOGRAPHY

See Art-ART

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

Possible career opportunities
A photography career offers exciting job prospects as a photojournalist, archivist, photo engraver, photographic crafts person, 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 three times, beginning, intermediate, or advanced classes of the same activity may only be repeated a maximum of three 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 080 to 199.

## Physical Education, Athletics and Dance Division  
Christine Worsley, Dean  
Physical Education Office Building 105  
925-685-1230 ext. 2736

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>Type</th>
<th>Notes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE-100</td>
<td>Aquatic Fitness</td>
<td>0.5-2</td>
<td>SC</td>
<td>May be repeated three times</td>
<td>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)</td>
</tr>
<tr>
<td>PE-105</td>
<td>Water Aerobics</td>
<td>0.5-2</td>
<td>SC</td>
<td>May be repeated three times</td>
<td>This is an activity course designed to improve muscular strength, flexibility and cardiovascular fitness, while reducing stress on the body by performing exercises in the water. Exercises will involve variations in movement and tempo to achieve fitness improvements. CSU, UC (credit limits may apply to UC - see counselor)</td>
</tr>
<tr>
<td>PE-106</td>
<td>Swimming</td>
<td>0.5-2</td>
<td>SC</td>
<td>May be repeated three times</td>
<td>This is an activity course designed to teach the fundamental skills of swimming. Emphasis will be on proper swimming techniques for the four competitive swimming strokes. Instruction will also address personal swimming safety, swimming strength development, and health and fitness improvement through swimming. CSU, UC (credit limits may apply to UC - see counselor)</td>
</tr>
<tr>
<td>PE-107</td>
<td>Stretch and Yoga for Sports</td>
<td>0.5-2</td>
<td>SC</td>
<td>May be repeated three times</td>
<td>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)</td>
</tr>
<tr>
<td>PE-108</td>
<td>Beginning Hatha Yoga</td>
<td>0.5-2</td>
<td>SC</td>
<td>May be repeated once</td>
<td>This is an activity course exploring the principles of Hatha Yoga and how they apply to achieving lifetime fitness. It incorporates yoga postures (asanas) designed to strengthen and tone the body. Breathing exercises, relaxation and meditation techniques are learned and practiced throughout the course. CSU, UC (credit limits may apply to UC - see counselor)</td>
</tr>
<tr>
<td>PE-109</td>
<td>Intermediate/Advanced Hatha Yoga</td>
<td>0.5-2</td>
<td>SC</td>
<td>May be repeated once</td>
<td>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)</td>
</tr>
</tbody>
</table>
**PE-110  Water Polo**  
.5-2 units SC  
- May be repeated three times  
- Variable hours  
- Recommended: Intermediate or above swimming ability  
This is an activity course covering all aspects of the sport of water polo. The rules, equipment, techniques and strategies, etc., will be applied to in-class water polo competition. 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  
This is an activity course in guided strength training exercises performed to a specific music cadence and designed for improvement in muscular strength, muscular endurance and flexibility. Fitness assessments are performed and nutritional/wellness topics are 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 is an activity course designed to improve aerobic cardiorespiratory fitness utilizing a variety of choreographed and non-choreographed movement patterns. Proper stepping techniques, coinciding and non-coinciding arm and leg patterns, floor exercises and mat work, light hand weights, stretching, abdominals, and lecture will be incorporated. CSU, UC (credit limits may apply to UC - see counselor)

**PE-117  Fitness Jogging**  
.5-2 units SC  
- May be repeated three times  
- Variable hours  
This is an activity course in which students will develop physical fitness through jogging. Students will learn how to improve jogging technique, assess and measure cardiovascular fitness, as well as develop an individualized jogging program for overall fitness and health. In addition, topics such as equipment, safety, nutrition, shoes (form and function), and injury prevention will be addressed. CSU, UC (credit limits may apply to UC - see counselor)

**PE-118  Introduction to Triathlon Training**  
.5-2 units SC  
- May be repeated three times  
- Variable hours  
- Note: Students must provide bicycle and helmet  
This is an introductory activity course in triathlon training which offers students the opportunity to cross-train in triathlon skills (swimming, biking, and running) and learn introductory training methods to accomplish an increased level of fitness through training. The history, rules, equipment, and safety concerns of triathlon will be discussed, as well as, training methods and race strategies. No previous experience 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  
This is an activity course 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 to be discussed include: fitness and health assessment, equipment and safety, walking techniques, motivation, nutrition basics, program design and evaluation, volksporting 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 is an activity course designed to improve cardiovascular fitness, muscular flexibility and 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  Fitness Center - Strength Training**  
.5-2 units SC  
- May be repeated three times  
- Variable hours  

This is an activity course designed to increase muscular strength and endurance utilizing plate-loaded apparatus, free weights, selectorized weight machines, and Olympic lifting techniques. Students will be required to attend two mandatory meetings (orientation and final exam), that will be designated in the schedule of classes. CSU, UC (credit limits may apply to UC - see counselor)

**PE-125  Power Lifting**  
.5-2 units SC  
- May be repeated three times  
- Variable hours  

This is an activity course designed to teach the basic elements of power lifting. Technique will be emphasized and training programs will be developed. The sport of power lifting, as well as safety and nutritional information as it relates to power lifting, will also be discussed. CSU, UC (credit limits may apply to UC - see counselor)

**PE-126  Super Circuit**  
.5-2 units SC  
- May be repeated three times  
- Variable hours  

This is an activity course that combines aerobic and resistance training exercises to promote cardiovascular fitness and improve muscular strength, endurance, and flexibility. Individual health and fitness assessments will be conducted during the semester. Nutrition and other wellness topics will also be included. CSU, UC (credit limits may apply to UC - see counselor)

**PE-127  Hips, Thighs and Abs**  
.5-2 units SC  
- May be repeated three times  
- Variable hours  

This is an activity course emphasizing toning and strengthening of the hip, thigh, and ab (abdominal) areas. Range of motion at all joints will increase as a result of flexibility movements. General muscle tone and knowledge of anatomy will be included. Various aerobic techniques and props will be utilized including, but not limited to, therabands, xercuffs, mat work, and movements that Joe Pilates originated. CSU, UC (credit limits may apply to UC - see counselor)

**PE-128  Cardio Kickboxing**  
.5-2 units SC  
- May be repeated three times  
- Variable hours  
- Recommended: Ability to participate in vigorous activity  

This course will combine skills and techniques from boxing, self defense and various forms of martial arts, such as, Karate and Muay Tai to promote a fun, yet effective and challenging 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-129  Stationary Cycling**  
.5-2 units SC  
- May be repeated three times  
- Variable hours  

This is an activity course using group stationary cycling training to develop cardiovascular fitness. Students will also utilize various strength and flexibility modalities, mental imagery, visualization, nutrition concepts, as well as assessment of their cardiovascular fitness training level through heart rate monitoring and resting heart rate values. CSU, UC (credit limits may apply to UC - see counselor)

**PE-130  Hiking**  
.5-2 units SC  
- May be repeated three times  
- Variable hours  
- Note: First class session will be held in the classroom  

This is an activity course enabling students to learn about hiking and safety skills while enjoying the beautiful parks and open spaces 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 on hilly terrain and are all one day hikes. CSU, UC (credit limits may apply to UC - see counselor)

**PE-131  Fitness After Fifty**  
.5-2 units SC  
- May be repeated three times  
- Variable hours  
- Note: Students are encouraged to seek permission from their doctor before beginning the course  

This is an activity course designed for students over fifty of all fitness levels. Topics will include conditioning principles, goal-setting, fitness assessments and nutrition guidelines. This course is 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 is an activity course that provides students with a basic knowledge of powerlifting as applied to women. 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 classes. 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 Intermediate/Advanced Golf
.5-2 units SC
• May be repeated once
• Variable hours
• Recommended: PE 162 or equivalent
This is an activity course focusing on 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 running, interval and track training methods. Warm-up, stretching, interval training, cool down and recovery will be covered, as well as, information on types of racing, race strategies and techniques. Other topics to be explored include history, equipment, safety, assessing cardiovascular effects, running and race 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 is an activity course for pre-season track and field conditioning. The student will have the opportunity to analyze techniques, develop training programs, and acquire 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 is an activity course designed for students with previous baseball experience, who have aspirations of playing intercollegiate baseball. The history, rules, intermediate techniques and strategies, as well as conditioning for baseball will be addressed. 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 is an activity course introducing students to the fundamentals of flag football. Rules of the game, safety, offensive and defensive skills, game strategy, and methods of scoring will also be addressed. CSU, UC (credit limits may apply to UC - see counselor)

PE-188 Soccer

.5-2 units SC
- May be repeated three times
- Variable hours

This is an activity course emphasizing the fundamental skills and strategies of soccer. This course focuses on rules, etiquette, safety, and soccer skills, such as dribbling, passing, shooting and defending. Offensive and defensive positions and basic team strategies are also addressed. No previous soccer experience is necessary. CSU, UC (credit limits may apply to UC - see counselor)

PE-189 Men's Lacrosse

.5-2 units SC
- May be repeated three times
- Variable hours
- Note: Students must supply their own protective equipment and lacrosse stick

This is an activity course emphasizing the fundamental skills and strategies of men's lacrosse. This course focuses on rules, etiquette, safety, and lacrosse skills, such as catching, passing, cradling, shooting, and defending. Offensive and defensive positions and basic team strategies are also addressed. No previous lacrosse experience is necessary. Open to men and women. 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 is an activity course designed to teach the student the beginning skills of volleyball and to incorporate them into successful non competitive 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
- Recommended: PE 192 or equivalent

This is an activity course focused on intermediate/advanced volleyball knowledge and skills. The course will develop 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  Sport-Specific Athletic Conditioning  
.5-2 units SC  
• May be repeated three times  
• Variable hours  
• Recommended: PE 192 or equivalent  
An activity course designed for students to increase their physical conditioning, skill/technique level, and knowledge of a specific sport. See current class schedule for sport offerings. CSU, UC (credit limits may apply to UC-see counselor)

PE-298  Independent Study  
.5-3 units SC  
• May be repeated three times  
• Variable hours  
• 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 the faculty. CSU

PE-299  Student Instructional Assistant  
.5-3 units SC  
• May be repeated three times  
• Variable hours  
• Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.  
Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

PHYSICAL EDUCATION ADAPTIVE – PEADP

PEADP-146  Adapted Individualized Exercise  
.5-2 units SC  
• May be repeated three times  
• Variable hours  
• Note: Medical release form must be completed by a physician. Register with DSS counselor.  
This is an activity course designed to provide reasonable accommodations, in maintaining and/or increasing physical abilities, to students with disabilities. Exercises promoting balance, flexibility, muscular strength and endurance, aerobic conditioning, and coordination will be performed. Additional topics will include safety considerations, training principles and the importance of regular exercise for overall wellness. CSU, UC (credit limits may apply to UC - see counselor)

PEADP-148  Adapted Resistance Training  
.5-2 units SC  
• May be repeated three times  
• Variable hours  
• Note: Medical release form must be completed by a physician. Register with DSS counselor.  
This is an activity course designed to provide reasonable accommodations in resistance training, to students with disabilities. Exercises emphasize muscular strength, muscular endurance, and flexibility. Additional topics will include safety considerations, resistance training principles, and the role of exercise in overall wellness. CSU, UC (credit limits may apply to UC - see counselor)

PEADP-149  Adapted Swimming  
.5-2 units SC  
• May be repeated three times  
• Variable hours  
• Note: Medical release form must be completed by a physician. Register with DSS counselor.  
This is an activity course designed to provide reasonable accommodations in swimming, to students with disabilities. Students will utilize adapted/fundamental swimming skills for the purpose of improving aerobic conditioning. Additional topics will include aquatic safety methods, conditioning principles, and use of aquatic equipment. CSU, UC (credit limits may apply to UC - see counselor)
**PRogRaMs anD CouRses**
Diablo Valley College
Catalog 2010-2011

**PEADP-151 Adapted Aquatic Exercise**
.5-2 units SC
- May be repeated three times
- Variable hours
- Note: Medical release form must be completed by a physician. Register with DSS counselor.

This is an activity course designed to provide reasonable accommodations in aquatic exercise, to students with disabilities. Students will perform exercises in the water in order to maintain or improve muscular strength and endurance, aerobic conditioning, and flexibility. Students will also learn conditioning principles and develop a personalized program to continue after completing the course. CSU, UC (credit limits may apply to UC - see counselor)

**PHYSICAL EDUCATION COMBATIVE – PECMB**

Physical Education, Athletics and Dance Division
Christine Worsley, Dean
Physical Education Office Building 105
925-685-1230 ext. 2736

**PECMB-112 Self-Defense**
.5-2 units SC
- May be repeated three times
- Variable hours

This is an activity course that combines defensive techniques and concepts from jujitsu, judo, karate, and aikido. Students will explore self-defense techniques, as well as increase muscular fitness (strength, endurance, flexibility, and balance), improve self-discipline, focus, balance, relieve stress, and increase mental awareness. 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

This is an activity course involving the history, philosophy, techniques and safety aspects of tai chi chuan. Tai chi chuan is a slow moving Chinese martial art used as exercise and self-development. Students will learn fundamental forms, as well as increase muscular strength and endurance, flexibility and balance. CSU, UC (credit limits may apply to UC - see counselor)

**PECMB-114 Aikido**
.5-2 units SC
- May be repeated once
- Variable hours

This is an activity course involving the history, philosophy, techniques and safety aspects of aikido. This is a Japanese warrior art involving a noncompetitive, non-fighting discipline, that is comprised purely of defensive techniques and principles of movement. Students will learn fundamental aikido techniques, as well as increase cardiovascular and muscular fitness. 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 is an activity course using Aikido weapons Jo (wooden staff) and Bokken (wooden sword.) The historical, philosophical, and safety aspects of Aikido weapons Jo and Bokken will also be explored. 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 is an activity course involving the history, philosophy, techniques and safety aspects of judo. Judo emphasizes throws and pins, self-discipline, punctuality, courtesy, and respect. Students will learn judo techniques, as well as increase cardiovascular and muscular fitness. 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 is an activity course involving the history, philosophy, techniques and safety aspects of Kajukembo Karate. This martial art form teaches the way of the “empty hand” using legs, arms and fists, as well as Kiai (expression of inner energy), which accompanies each action. Students will learn karate techniques, as well as increase cardiovascular and muscular fitness. 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 is an activity course focusing on an intermediate level of tai chi chuan practice. Students will master more complex forms and continue to develop concentration, and cardiovascular and muscular fitness. 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 is an activity course focusing on an intermediate level of aikido practice. Students will explore more complex skills and techniques with an emphasis on increased pace, as well as continue to develop concentration, and cardiovascular and muscular fitness. 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 classes. CSU

PEDAN-128 Pilates Mat Work  
.5-2 units SC  
- May be repeated three times  
- Variable hours

This is an activity course introducing basic mat 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 musculoskeletal 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-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 Modern Dance Fundamentals  
.5-2 units SC  
- May be repeated three times  
- Variable hours  
This beginning technique course will familiarize students with proper modern dance alignment, center work, and movement across the floor. Basic understanding of modern dance history and appreciation of dance as an art will be discussed. 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 classes. 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 classes. CSU

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  
- Prerequisite: PEDAN 162 or equivalent  
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  
- Recommended: PEDAN 162 or equivalent  
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**

**Physical Education, Athletics and Dance Division**
Christine Worsley, Dean
Physical Education Office Building 105
925-685-1230 ext. 2736

---

**PEIC-200 Intercollegiate Baseball, Men**
3 units SC
- May be repeated three times
- 175 hours activity per term
- Recommended: Competitive high school baseball 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-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 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
Christine Worsley, Dean
Physical Education Office Building 105
925-685-1230 ext. 2736

Possible career opportunities
A certified athletic trainer is an allied health care professional who works as a consultant and advisor to athletes, parents and coaches. A certified athletic trainer must obtain a bachelor’s degree from a CAAHEP accredited program. After obtaining a BS a graduate can work as a certified athletic trainer, physical therapist, physician, podiatrist or physician assistant.

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

Associate in science degrees
Coaching
Fitness instruction/personal training
Sports medicine/athletic training

Certificates of achievement
Coaching
Fitness instruction/personal training

Associate in science degree - Coaching
The associate in science degree in physical education: coaching (sport specific) is designed for students who are interested in obtaining a job as an athletic coach. The associate in science degree is appropriate for those students who wish to become a youth or secondary school coach. Specific sport options offered include baseball, basketball, cross-country, football, soccer, softball, swimming, tennis, track and field, volleyball and water polo. Students who wish to transfer to four-year institutions must consult with program faculty and college counselors to insure that the requirements for transfer to appropriate institutions are met. Possible programs at the baccalaureate level include study toward a teaching credential to become a secondary school teacher/coach or other degree preparing the student to become a college coach. To earn a degree, students must complete each course used to meet a major requirement with a “C” grade or higher and complete all graduation requirements as listed in the catalog. Some courses may satisfy both major and other graduation requirements; however the units are only counted once.

major requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSCI 230</td>
<td>Advanced First Aid and 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>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>
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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>PETHE 262</td>
<td>Theory of Coaching Basketball</td>
<td>3</td>
</tr>
<tr>
<td>PETHE 263</td>
<td>Theory of Coaching Cross Country</td>
<td>3</td>
</tr>
<tr>
<td>PETHE 264</td>
<td>Theory of Coaching Football</td>
<td>3</td>
</tr>
<tr>
<td>PETHE 265</td>
<td>Theory of Coaching Soccer</td>
<td>3</td>
</tr>
<tr>
<td>PETHE 266</td>
<td>Theory of Coaching Tennis</td>
<td>3</td>
</tr>
<tr>
<td>PETHE 267</td>
<td>Theory of Coaching Track and Field</td>
<td>3</td>
</tr>
<tr>
<td>PETHE 268</td>
<td>Theory of Coaching Swimming</td>
<td>3</td>
</tr>
<tr>
<td>PETHE 269</td>
<td>Theory of Coaching Water Polo</td>
<td>3</td>
</tr>
<tr>
<td>PETHE 270</td>
<td>Theory of Coaching Baseball</td>
<td>3</td>
</tr>
<tr>
<td>PETHE 271</td>
<td>Theory of Coaching Softball</td>
<td>3</td>
</tr>
<tr>
<td>PETHE 272</td>
<td>Theory of Coaching Volleyball</td>
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plus at least 2 units from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PE 106, PE 110, PE 172, PE 173, PE 174, PE 180, PE 182, PE 185, PE 188, PE 190, PE 192, PE 193, PE 199</td>
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or

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>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</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* activity course or intercollegiate athletic participation must be selected in area of coaching emphasis

total minimum required units 21

recommended degree electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOSC 139</td>
<td>Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>PETHE 210</td>
<td>Introduction to Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>PETHE 279</td>
<td>Overview of Sports Medicine and Fitness Professions</td>
<td>3</td>
</tr>
<tr>
<td>PETHE 285</td>
<td>Advanced Sports Medicine and Athletic Training</td>
<td>3</td>
</tr>
</tbody>
</table>

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 then 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 higher and complete all graduation requirements as listed in the catalog. Some courses may satisfy both major and other graduation requirements; however, the units are only counted once.

**major requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSCI 230</td>
<td>Advanced First Aid and 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>
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</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>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOSC 101</td>
<td>Fundamentals of Biological Science</td>
<td>3</td>
</tr>
<tr>
<td>BIOSC 102</td>
<td>Fundamentals of Biological Science with laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOSC 116</td>
<td>Human Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOSC 117</td>
<td>Human Biology with laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOSC 120</td>
<td>Introduction to Human Anatomy and Physiology</td>
<td>5</td>
</tr>
<tr>
<td>BIOSC 139</td>
<td>Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>BIOSC 140</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
</tbody>
</table>

**plus at least 3 units from:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>HSCI 124</td>
<td>Health and Wellness</td>
<td>3</td>
</tr>
<tr>
<td>HSCI 170</td>
<td>Women’s Health</td>
<td>3</td>
</tr>
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**plus at least 3 units from:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
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</thead>
<tbody>
<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>

Emphasis requirements: All students will complete the core courses above and also select an area of emphasis below.

**Personal training emphasis**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PETHE 291</td>
<td>Professional Aspects of Personal Training and Fitness Instruction</td>
<td>3</td>
</tr>
</tbody>
</table>

**plus at least 2 units from:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 122</td>
<td>Fitness Center - Strength Training</td>
<td>0.5-2</td>
</tr>
<tr>
<td>PE 125</td>
<td>Power Lifting</td>
<td>0.5-2</td>
</tr>
<tr>
<td>PE 135</td>
<td>Power Lifting for Women</td>
<td>0.5-2</td>
</tr>
</tbody>
</table>

**Group exercise emphasis**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PETHE 293</td>
<td>Professional Aspects of Group Exercise Instruction</td>
<td>2</td>
</tr>
</tbody>
</table>

**plus 3 units from a minimum of three courses from:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 107</td>
<td>Stretch and Yoga for Sports</td>
<td>0.5-2</td>
</tr>
<tr>
<td>PE 108</td>
<td>Beginning Hatha Yoga</td>
<td>0.5-2</td>
</tr>
<tr>
<td>PE 115</td>
<td>Body Sculpt</td>
<td>0.5-2</td>
</tr>
<tr>
<td>PE 116</td>
<td>Step Aerobics</td>
<td>0.5-2</td>
</tr>
<tr>
<td>PE 120</td>
<td>Physical Fitness</td>
<td>0.5-2</td>
</tr>
<tr>
<td>PE 121</td>
<td>Aerobics</td>
<td>0.5-2</td>
</tr>
<tr>
<td>PE 126</td>
<td>Super Circuit</td>
<td>0.5-2</td>
</tr>
<tr>
<td>PE 127</td>
<td>Hips, Thighs and Abs</td>
<td>0.5-2</td>
</tr>
<tr>
<td>PE 128</td>
<td>Cardio Kickboxing</td>
<td>0.5-2</td>
</tr>
<tr>
<td>PE 129</td>
<td>Stationary Cycling</td>
<td>0.5-2</td>
</tr>
<tr>
<td>PE 195</td>
<td>Plyometric and Agility Training for Female Athletes</td>
<td>0.25-2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEDAN 128</td>
<td>Pilates Mat Work</td>
<td>0.5-2</td>
</tr>
</tbody>
</table>

**total minimum required units**

27

**recommended degree electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSMG 191</td>
<td>Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>PETHE 210</td>
<td>Introduction to Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>PETHE 279</td>
<td>Overview of Sports Medicine and Fitness Professions</td>
<td>3</td>
</tr>
<tr>
<td>PETHE 283</td>
<td>Introduction to Sports Massage</td>
<td>1.5</td>
</tr>
<tr>
<td>PETHE 285</td>
<td>Advanced Sports Medicine and Athletic Training</td>
<td>3</td>
</tr>
<tr>
<td>PETHE 292</td>
<td>Personal Training National Examination Preparation</td>
<td>3</td>
</tr>
</tbody>
</table>

**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.

DVC sports medicine/athletic training students who intend to transfer must consult with a program advisor or counselor to ensure that the requirements for transfer to four-year institutions of their choice are met. Students who intend to transfer are advised to select either General Education Option 2 (IGETC) or Option 3 (CSU Breadth). General Education Option 1 (DV General Education) is appropriate for students who do not intend to transfer.

Students must complete each course used to meet a major requirement with a "C" grade or higher and maintain an overall GPA of 2.75 or higher and complete all graduation requirements as listed in the catalog. Some courses may satisfy both major and other graduation requirements; however, the units are only counted once.
major requirements units
BIOISC 199 Human Anatomy .......................... 5
HSCI 124 Health and Wellness......................... 3
PETHE 279 Overview of Sports Medicine and Fitness Professions .................. 2
PETHE 281 Principles of Optimizing Human Performance .............................. 3
PETHE 282 Exercise Techniques and Physical Fitness Testing .................. 1
PETHE 283 Introduction to Sports Massage .................. 1.5
PETHE 284 Introduction to Sports Medicine and Athletic Training .................. 3
PETHE 285 Advanced Sports Medicine and Athletic Training .................. 3
PETHE 286 Clinical Experiences in Sports Medicine and Athletic Training I .............. 2
PETHE 287 Clinical Experiences in Sports Medicine and Athletic Training II .............. 2
PETHE 288 Clinical Experiences in Sports Medicine and Athletic Training III .............. 4
PSYCH 101 Introduction to Psychology .................. 3

plus at least 3 units from: *
CHEM 108 Introductory Chemistry .................. 4
CHEM 109 Introduction to Organic and Biochemistry .... 4
CHEM 120 General College Chemistry .................. 4
PHYS 110 Elementary Physics .................. 3
PHYS 120 General College Physics .................. 4

plus at least 3 units from:
BIOISC 140 Human Physiology .................. 5
HSCI 230 Advanced First Aid/CPR .................. 3
NUTRI 160 Nutrition: Science and Applications .................. 3
PETHE 210 Introduction to Kinesiology .................. 3

total minimum required units 38.5

*One course selection from Biology OR from Chemistry must have a laboratory.

Certificate of achievement - Coaching
The coaching certificate of achievement (sport specific) is a one-year course of study that prepares students to be an effective recreational, youth or secondary school coach. Specific sport options offered include baseball, basketball, cross-country, football, soccer, softball, swimming, tennis, track and field, volleyball and water polo. To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a grade of “C” or higher.

required courses units
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 Testing .................. 1
PETHE 284 Introduction to Sports Medicine and Athletic Training .................. 3

plus at least 3 units from:
NUTRI 115 Nutrition and Health: Personal Applications .................. 3
NUTRI 120 Sports Nutrition: Fueling the Athlete .................. 3
NUTRI 160 Nutrition: Science and Applications .................. 3

plus at least 3 units from:
PETHE 262 Theory of Coaching Basketball .................. 3
PETHE 263 Theory of Coaching Cross Country .................. 3
PETHE 264 Theory of Coaching Football .................. 3
PETHE 265 Theory of Coaching Soccer .................. 3
PETHE 266 Theory of Coaching Tennis .................. 3
PETHE 267 Theory of Coaching Track and Field .................. 3
PETHE 268 Theory of Coaching Swimming .................. 3
PETHE 269 Theory of Coaching Water Polo .................. 3
PETHE 270 Theory of Coaching Baseball .................. 3
PETHE 271 Theory of Coaching Softball .................. 3
PETHE 272 Theory of Coaching Volleyball .................. 3

plus at least 2 units from: *
PE 106, PE 110, PE 172, PE 173, PE 174, PE 180, PE 182, PE 185, PE 188, PE 190, PE 192, PE 193, PE 199

or

PEIC 200, PEIC 202A or B, PEIC 203A or B, PEIC 204, PEIC 205, PEIC 206, PEIC 210, PEIC 215, PEIC 216, PEIC 217, PEIC 218, PEIC 219, PEIC 220, PEIC 221, PEIC 223, PEIC 224, PEIC 225

* Selected activity course or intercollegiate athletic participation must correlate with theory of coaching course.

total minimum required units 21

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.

To earn a certificate of achievement, a student must complete each course used to meet a certificate requirement with a grade of “C” or higher. Courses are available in the day and evening.

required courses units
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 Testing .................. 1
PETHE 284 Introduction to Sports Medicine and Athletic Training .................. 3

plus at least 3 units from:
NUTRI 115 Nutrition and Health: Personal Applications .................. 3
NUTRI 120 Sports Nutrition: Fueling the Athlete .................. 3
NUTRI 160 Nutrition: Science and Applications .................. 3

plus at least 3 units from:
PETHE 262 Theory of Coaching Basketball .................. 3
PETHE 263 Theory of Coaching Cross Country .................. 3
PETHE 264 Theory of Coaching Football .................. 3
PETHE 265 Theory of Coaching Soccer .................. 3
PETHE 266 Theory of Coaching Tennis .................. 3
PETHE 267 Theory of Coaching Track and Field .................. 3
PETHE 268 Theory of Coaching Swimming .................. 3
PETHE 269 Theory of Coaching Water Polo .................. 3
PETHE 270 Theory of Coaching Baseball .................. 3
PETHE 271 Theory of Coaching Softball .................. 3
PETHE 272 Theory of Coaching Volleyball .................. 3

plus at least 2 units from: *
PE 106, PE 110, PE 172, PE 173, PE 174, PE 180, PE 182, PE 185, PE 188, PE 190, PE 192, PE 193, PE 199

or

PEIC 200, PEIC 202A or B, PEIC 203A or B, PEIC 204, PEIC 205, PEIC 206, PEIC 210, PEIC 215, PEIC 216, PEIC 217, PEIC 218, PEIC 219, PEIC 220, PEIC 221, PEIC 223, PEIC 224, PEIC 225

* Selected activity course or intercollegiate athletic participation must correlate with theory of coaching course.

total minimum required units 21
plus at least three units from:
NUTRI 115 Nutrition and Health: Personal Applications 3
NUTRI 120 Sports Nutrition: Fueling the Athlete 3
NUTRI 160 Nutrition: Science and Applications 3

Emphasis requirements: All students will complete the core courses above and also select an area of emphasis below.

Personal training emphasis
PE 122 Fitness Center - Strength Training 0.5-2
PE 125 Power Lifting 0.5-2
PE 135 Power Lifting for Women 0.5-2
PETHE 291 Professional Aspects of Person Training and Fitness Instruction 3

Group exercise emphasis
PETHE 293 Professional Aspects of Group Exercise Instruction 2

plus 2 units from a minimum of two 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 Stationary Cycling 0.5-2

total minimum required units 20

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-150 Topics in Physical Education Theory
3-4 units SC
• May be repeated three times
• Variable hours
• Recommended: Prerequisites may vary with topic offered, depending upon depth of topic

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-187 Analysis of the Multiple Aspects of Modern Day Football
.5-2 units SC
• May be repeated three times
• Variable hours
• Recommended: Tryout auditions or equivalent

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, UC (credit limits may apply to UC - see counselor)

PETHE-262 Theory of Coaching Basketball
3 units SC
• 54 hours lecture per term

This course is designed to provide students with an understanding of all facets of coaching basketball. The history, terminology, rules, strategies, skills, methods of instruction, conditioning, mental preparation, and program building will be covered. This course is appropriate for those looking for a career in coaching, current youth coaches and the athlete wanting to increase their knowledge of the sport. 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 is designed to provide students with an understanding of all facets of coaching cross country. The history, terminology, rules, strategies, skills, methods of instruction, conditioning mental preparation, and program building will be covered. This course is appropriate for those looking for a career in coaching, current youth coaches and the athlete wanting to increase their knowledge of the sport. No previous coaching experience is necessary. 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 is designed to provide students with an understanding of all facets of coaching football. The history, terminology, rules, strategies, skills, methods of instruction, conditioning mental preparation, and program building will be covered. This course is appropriate for those looking for a career in coaching, current youth coaches and the athlete wanting to increase their knowledge of the sport. No previous coaching experience is necessary. 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 is designed to provide students with an understanding of all facets of coaching soccer. The history, terminology, rules, strategies, skills, methods of instruction, conditioning mental preparation, and program building will be covered. This course is appropriate for those looking for a career in coaching, current youth coaches and the athlete wanting to increase their knowledge of the sport. No previous coaching experience is necessary. 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 is designed to provide students with an understanding of all facets of coaching tennis. The history, terminology, rules, strategies, skills, methods of instruction, conditioning mental preparation, and program building will be covered. This course is appropriate for those looking for a career in coaching, current youth coaches and the athlete wanting to increase their knowledge of the sport. No previous coaching experience is necessary. 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 is designed to provide students with an understanding of all facets of coaching track and field. The history, terminology, rules, strategies, skills, methods of instruction, conditioning mental preparation, and program building will be covered. This course is appropriate for those looking for a career in coaching, current youth coaches and the athlete wanting to increase their knowledge of the sport. No previous coaching experience is necessary. 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 is designed to provide students with an understanding of all facets of coaching swimming. The history, terminology, rules, strategies, skills, methods of instruction, conditioning mental preparation, and program building will be covered. This course is appropriate for those looking for a career in coaching, current youth coaches and the athlete wanting to increase their knowledge of the sport. No previous coaching experience is necessary. 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 is designed to provide students with an understanding of all facets of coaching water polo. The history, terminology, rules, strategies, skills, methods of instruction, conditioning mental preparation, and program building will be covered. This course is appropriate for those looking for a career in coaching, current youth coaches and the athlete wanting to increase their knowledge of the sport. No previous coaching experience is necessary. CSU, UC (credit limits may apply to UC - see counselor)

PETHE-270  Theory of Coaching Baseball
3 units  SC
• 54 hours lecture per term
This course is designed to provide students with an understanding of all facets of coaching baseball. The history, terminology, rules, strategies, skills, methods of instruction, conditioning mental preparation, and program building will be covered. This course is appropriate for those looking for a career in coaching, current youth coaches and the athlete wanting to increase their knowledge of the sport. No previous coaching experience is necessary. 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 is designed to provide students with an understanding of all facets of coaching softball. The history, terminology, rules, strategies, skills, methods of instruction, conditioning mental preparation, and program building will be covered. This course is appropriate for those looking for a career in coaching, current youth coaches and the athlete wanting to increase their knowledge of the sport. No previous coaching experience is necessary. 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 is designed to provide students with an understanding of all facets of coaching volleyball. The history, terminology, rules, strategies, skills, methods of instruction, conditioning, mental preparation, and program building will be covered. This course is appropriate for those looking for a career in coaching, current youth coaches and the athlete wanting to increase their knowledge of the sport. No previous coaching experience is necessary. 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 287 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

PETHE-299 Student Instructional Assistant
.5-3 units SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU
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 (may be taken concurrently) 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. CSU, UC (credit limits may apply to UC - see counselor)

**PHYSC-150** Topics in Physical Science  
.3-4 units SC  
• May be repeated three times  
• Variable hours  
A supplemental course in physical science to provide a study of current concepts and problems in physical science. Specific topics will be announced in the schedule of classes. CSU

**PHYSC-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

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.

**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 or equivalent (may be taken concurrently)  
• Recommended: Eligibility for ENGL 122 or equivalent  
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)

**PHYS-113** Elementary Modern Physics: From Atoms to the Big Bang  
3 units SC  
• 54 hours lecture per term  
• Prerequisite: MATH 110 and 114 or equivalents  
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, UC
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. 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 or equivalent
Second semester college physics for life science majors and others. A lecture and laboratory study of electricity, magnetism, light and modern physics. 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) or equivalents
- 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) or equivalents
- Recommended: Eligibility for ENGL 122 or equivalent
This course adds calculus to the mathematical techniques used in PHYS 121 (general physics). This course is required of architecture and biological science majors transferring to UC Berkeley and may be a requirement at other UC campuses. CSU, UC (credit limits may apply to UC - see counselor)

PHYS-129  Introductory Physics for Engineers
4 units SC
- 90 hours lecture/36 hours laboratory per term
- Co-requisite: MATH 192 or equivalent (may be taken previously)
- Recommended: Eligibility for ENGL 122 or equivalent
- Note: This course or its equivalent is required for PHYS 130
Designed for engineering, physics and chemistry majors, this course is a 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. 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. 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
- Co-requisite: MATH 193 (may be taken previously) or equivalent
- Recommended: Eligibility for ENGL 122 or equivalent
- Note: For those students who have not recently completed a full year of high school physics, the physics department strongly recommends completion of PHYS 129 before enrolling in PHYS 130
Designed for engineering and physics science majors (such as physics, chemistry, and geology), this course is a lecture and laboratory study of classical mechanics: vectors, particle kinematics, Newton’s laws, equilibrium of rigid bodies, work and energy, gravitation, fluids, momentum, rotational kinematics and dynamics, and oscillations and waves in elastic media. CSU, UC (credit limits may apply to UC - see counselor)

PHYS-150  Topics in Physics
.3-4 units SC
- May be repeated three times
- Variable hours
A supplemental course in physics to provide a study of current concepts and problems in physics. Specific topics will be announced in the schedule of classes. 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 and MATH 292 (may be taken concurrently) or equivalents
- Recommended: Eligibility for ENGL 122 or equivalent
Designed for engineering and physical science majors (such as physics, chemistry, and geology), this course is a continuation of PHYS 130. It is a lecture and laboratory study of thermodynamics, electricity, and magnetism. Topics included are temperature, heat and the first and second laws of thermodynamics, kinetic theory of gases, electric field and electric potential of static charges, magnetic field of moving charges, current, voltage, resistance, capacitance, induced electric fields, Maxwell’s equations and plane electromagnetic waves. 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: PHYS 230 and MATH 294 or equivalents (may be taken concurrently)
- Recommended: Eligibility for ENGL 122 or equivalent

Designed for engineering, physics and chemistry majors, this course is a continuation of PHYS 130 and 230. It is a lecture and laboratory study of optics and modern physics. Topics included are light as an electromagnetic wave, geometric and wave optics, special relativity, quantum physics, atomic and molecular physics, condensed matter physics, and nuclear physics. CSU, UC (credit limits may apply to UC - see counselor)

PHYS-299  Student Instructional Assistant
.5-3 units  SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

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PLUMBING – PLUMB

Physical Sciences and Engineering Division
Dennis Smith, Dean
Physical Sciences Building 261
925-685-1230 ext. 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. Specific topics will be announced in the schedule of classes. CSU

PLUMB-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 current courses offerings.
An opportunity for advanced students to study special interests under the direction of the faculty. CSU

PLUMB-299 Student Instructional Assistant
.5-3 units SC
• May be repeated three times
• Variable hours
• Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.
Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU
POLITICAL SCIENCE – POLSC

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

**Possible career opportunities**
Political science courses offer insight into events at the local, state, national, and international level. Students develop critical thinking and other useful skills for a broad range of careers including education, public service and law. Most career options require more than two years of college study.

**Program level student learning outcomes**
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: [www.dvc.edu/slo](http://www.dvc.edu/slo) for the most current information.

**Associate in arts degree**
Political science

**Associate in arts degree - Political science**
Political science courses offer insight into events at the local, state, national, and international level. Students develop critical thinking and other useful skills for a broad range of careers including education, public service and law. Most career options require more than two years of college study.

Successful completion of the major will prepare students for transfer to a political science major, or other related fields at the university level.

The DVC Political Science major is intended for transfer. Students who intend to transfer must consult with a program advisor or counselor to ensure that the requirements for transfer to four-year institutions of their choice are met. Students who intend to transfer are advised to select General Education Option 2 (IGETC) or Option 3 (CSU Breadth). Option 1 (DVC General Education) is not generally advised.

To earn an associate of arts degree with a major in political science, students must complete each course used to meet a major requirement with a “C” grade or higher, maintain an overall GPA of 2.5 or higher in the coursework for the major, and complete all graduation requirements as listed in the catalog. Some courses may satisfy both major and other graduation requirements; however, the units are only counted once. Some variations in requirements may exist at certain four-year institutions; therefore, students who intend to transfer are advised to refer to the catalog of the prospective transfer institution and consult a counselor.

**Major Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLSC 120</td>
<td>Introduction to Politics</td>
<td>3</td>
</tr>
<tr>
<td>POLSC 121</td>
<td>Introduction to United States Government</td>
<td>3</td>
</tr>
</tbody>
</table>

**Complete 9 units from:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLSC 151</td>
<td>California Politics</td>
<td>3</td>
</tr>
<tr>
<td>POLSC 220</td>
<td>Comparative Politics</td>
<td>3</td>
</tr>
<tr>
<td>POLSC 240</td>
<td>Political Theory</td>
<td>3</td>
</tr>
<tr>
<td>POLSC 250</td>
<td>International Relations</td>
<td>3</td>
</tr>
</tbody>
</table>

**Complete 3 units from:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHR 130</td>
<td>Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ECON 220</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 221</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>HIST 120</td>
<td>History of the United States before 1877</td>
<td>3</td>
</tr>
<tr>
<td>HIST 121</td>
<td>History of the United States after 1877</td>
<td>3</td>
</tr>
<tr>
<td>HIST 125</td>
<td>History of the US: A Mexican-American Perspective</td>
<td>3</td>
</tr>
<tr>
<td>HIST 127</td>
<td>African American Perspective History of US to 1865</td>
<td>3</td>
</tr>
<tr>
<td>HIST 128</td>
<td>African American Perspective History of US after 1865</td>
<td>3</td>
</tr>
<tr>
<td>HIST 129</td>
<td>History of Asian-Pacific Islanders in the United States</td>
<td>3</td>
</tr>
<tr>
<td>HIST 140</td>
<td>History of Western Civilization to Renaissance</td>
<td>3</td>
</tr>
<tr>
<td>HIST 141</td>
<td>History of Western Civilization since Renaissance</td>
<td>3</td>
</tr>
<tr>
<td>HIST 150</td>
<td>History of East Asia (to 1600)</td>
<td>3</td>
</tr>
<tr>
<td>HIST 170</td>
<td>History of Women in the United States (Pre-Colonial-1877)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 142</td>
<td>Elementary Statistics with Probability</td>
<td>4</td>
</tr>
<tr>
<td>SOCSC 123</td>
<td>American Popular Culture</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO 121</td>
<td>Introduction to Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO 122</td>
<td>Critical Thinking About Social and Cultural Issues</td>
<td>3</td>
</tr>
</tbody>
</table>

*Other courses with the prefix SOCIO, HUMAN, PHILO, GEOG may be submitted for consideration and evaluation in their suitability towards the political science major.

**Total Minimum Required Units**

18

**POLSC-120**  Introduction to Politics

3 units  SC  
• 54 hours lecture per term  
• Recommended: Eligibility for ENGL 122 or equivalent

Introduction to concepts of politics and the state and relationship of the state and individual, as applied to the American political system. Comparison of the American and selected other political systems. CSU UC

**POLSC-121**  Introduction to United States Government

3 units  SC  
• 54 hours lecture per term  
• Recommended: Eligibility for ENGL 122 or equivalent

The course is a survey of the American political framework and process. The course covers the Constitutional structure and functions of the legislative, executive and
judicial branches at national, state and local levels, viewed in the context of political culture, political parties, pressure groups and citizenship. Emphasis will be placed on the impact of federal, state and local governments in California. CSU, UC

**POLSC-151 California Politics**
3 units SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
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 Political Science**
.3-4 units SC
- May be repeated three times
- Variable hours
A supplemental course in political science to provide a study of current concepts and problems in political science and related substantive areas. Specific topics will be announced in the schedule of classes. CSU

**POLSC-220 Comparative Politics**
3 units SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
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 or equivalent
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 or equivalent
Introduction to various aspects of international relations and politics. Consideration of such topics as the sovereignty, the nation-state and international politics, the nature of the global 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 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 the faculty. CSU

**POLSC-299 Student Instructional Assistant**
.5-3 units SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.
Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

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**PORTUGUESE – PORT**

Applied and Fine Arts Division
Michael Almaguer, Dean
Humanities Building 112 and 113
925-685-1230 ext. 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 subdivisions. Specific topics will be announced in the schedule of classes. CSU
PSYCHOLOGY – PSYCH

Social Sciences Division
Lyn Krause, Dean
Faculty Office 134
925-685-1230 ext. 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.

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

Associate in arts degree
Psychology

Associate in arts degree - Psychology

The psychology major at Diablo Valley College (DVC) provides students with an introduction to psychology as the scientific study of thought, feeling, and behavior, and a helping profession dedicated to solving human problems. The associate degree curriculum offers a broad general education, meets lower division requirements for many transfer university bachelor’s degree programs in psychology, and prepares students for entry-level positions in a variety of interpersonal careers. Associate degree graduates may assist psychologists and others in mental health centers, hospitals, child welfare agencies, correctional facilities, schools, and business settings.

Psychology includes a variety of sub-fields including clinical, counseling, developmental, forensic, social, cognitive, biological, and personality psychology. This associate degree in psychology can also provide preparation for transfer to a four year institution. Transfer and graduate studies in psychology can lead to careers as psychotherapists, college professors, scientific researchers, administrators, and business consultants.

Students who intend to transfer must consult with a program advisor or counselor to ensure that the requirements for transfer to four-year institutions of their choice are met. Students who intend to transfer are advised to select General Education Option 2 (IGETC) or Option 3 (CSU Breadth). General Education Option 1 (DVC General Education) is appropriate for students who do not intend to transfer.

To earn an associate in arts degree with a major in psychology, students must complete each course used to meet a major requirement with a “C” grade or higher, and complete all graduation requirements as listed in the catalog. Some courses may satisfy both major and other graduation requirements; however, the units are only counted once. Some variations in requirements may exist at certain four-year institutions; therefore, students who intend to transfer are advised to refer to the catalog of the prospective transfer institution and consult a counselor.

Program level student learning outcomes

Required major requirements units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH 101</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 145</td>
<td>Critical Thinking in Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 215</td>
<td>Research Methods in Psychology</td>
<td>3</td>
</tr>
<tr>
<td>MATH 142</td>
<td>Elementary Statistics with Probability</td>
<td>4</td>
</tr>
</tbody>
</table>

Program level student learning outcomes

Plus a minimum of 3 units from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOSC 101</td>
<td>Fundamentals of Biological Science</td>
<td>3</td>
</tr>
<tr>
<td>BIOSC 102</td>
<td>Fundamentals of Biological Science with laboratory</td>
<td>4</td>
</tr>
</tbody>
</table>

Program level student learning outcomes

Complete a minimum of 3 units from:

Area 1 (Identity and Interpersonal Relationships)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH 122</td>
<td>Psychology of Modern Life</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 140</td>
<td>Psychology of African Americans</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 141</td>
<td>Psychology of Latinos/Chicanos</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 160</td>
<td>Psychology of Women</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 240</td>
<td>Transpersonal Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

Program level student learning outcomes

Complete a minimum of 3 units from:

Area 2 (Abnormality, Personality and Social Context)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH 220</td>
<td>Personality Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 225</td>
<td>Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 230</td>
<td>Abnormal Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

Program level student learning outcomes

Complete a minimum of 3 units from:

Area 3 (Biology and Development)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH 115</td>
<td>Resiliency</td>
<td>1</td>
</tr>
<tr>
<td>PSYCH 130</td>
<td>Emotions, Learning and the Brain</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 190</td>
<td>Adolescent Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 200</td>
<td>Life-Span Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

Program level student learning outcomes

Total minimum required units

25

PSYCH-101 Introduction to Psychology

3 units, SC

- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
- Formerly PSYCH 210

Psychology 101 is a study of the major theories, methods and concepts 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. CSU, UC
PSYCH-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

PSYCH-122  Psychology in Modern Life
3 units  SC
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent
This course examines the psychological and physiological, and cultural factors involved in personality development, interpersonal relationships, and the relevance of psychology to social processes. CSU, UC

PSYCH-130  Emotions, Learning and the Brain
3 units  SC
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent
This course examines the psychology of emotions and social behavior. The brain is used as a model to describe motor, visual, and conceptual development; processes of emotion and learning as interactions between brain and environment; learning disabilities of children and adults. Information and theory will be examined for practical application. CSU, UC

PSYCH-140  Psychology of African Americans in a Multicultural Society
3 units  SC
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent
This course is a study of the 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 Latino/as, 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

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 classes. CSU

PSYCH-160  Psychology of Women
3 units  SC
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent
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, 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

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
PSYCH-299  Student Instructional Assistant

.5-3 units  SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

REAL ESTATE – RE

See Business-Real Estate – RE

RESPIRATORY THERAPY – RT

Associate in science degree
Respiratory therapy

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 Valley Center; 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 higher. For applications and information, contact the Career and Employment Services Office located in the Student Services Building at the Pleasant Hill Campus.

program prerequisites or equivalent  units
CHEM 108  Introductory Chemistry ......................... 4
ENGL 122  Freshman English: Composition and Reading I ........................................... 3
MATH 120  Intermediate Algebra ................................ 4

required general education courses  units
BIOSC 119  Fundamentals of Microbiology .................. 4
BIOSC 139  Human Anatomy .................................. 5
BIOSC 140  Human Physiology .................................. 5
PHYS 110  Elementary Physics .................................. 3
PSYCH 122  Psychology in Modern Life ..................... 3

total units of program prerequisites  11

major requirements
RT 101*  Principles of Respiratory Therapy I .............. 3
RT 101L  Beginning Clinical Practice ....................... 1
RT 102*  Beginning Laboratory ................................ 2
RT 103*  Basic Patient Care .................................. 0.5
RT 104A*  Principles of Respiratory Therapy II ........... 3
RT 104B*  Principles of Respiratory Therapy III .......... 3
RT 105A*  Intermediate Laboratory I .......................... 1
RT 105B*  Intermediate Laboratory II .......................... 0.5

plus at least 4 units from:
RT 106*  Intermediate Clinical Practice (twice) ............ 2
or
RT 107*  Intermediate Clinical Practice ....................... 4

plus all units from:
AH 151*  Applied Clinical Pharmacology ................... 2
RT 108*  Basic Principles of Respiratory Pathophysiology ............................................ 1
RT 130A*  Advanced Respiratory Therapy I .................. 2.5
RT 130B*  Advanced Respiratory Therapy II .................. 1.5
RT 130L*  Advanced Clinical Practice ........................ 2
RT 131A*  Principles of Mechanical Ventilation I .......... 2.5
RT 131B*  Principles of Mechanical Ventilation II ........ 2.5
RT 132*  Advanced Laboratory ...................................... 1
RT 133*  Mechanical Ventilation Laboratory .................. 2
RT 134*  Neonatal and Pediatric Respiratory Care ........ 1
RT 134L*  Clinical Practicum in Neonatal and Pediatric Respiratory Care ............... 1.5
RT 135*  Computer Simulations for Respiratory Care ...... 0.5
RT 136*  Critical Care Clinical Practice ..................... 3.5
RT 137*  Home Respiratory Care and Pulmonary Rehabilitation ............................................ 0.5
RT 138*  Special Rotations in Respiratory Care ............. 0.5
RT 139*  Pulmonary Function Testing ............................ 1
RT 139L*  Clinical Practice in Pulmonary Function Testing .................................................. 0.5
RT 145*  Cardio-Pulmonary Resuscitation Basic Life Support ............................................ 0.5

*These are Ohlone College courses.
Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four. Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

Certificate of achievement - Russian
This certificate of achievement was created to give students the opportunity to show potential employers in this country and in other countries that the student has completed a certain number of courses in Russian and prepares students with an intermediate to advanced knowledge of Russian and familiarizes them with the culture of Russia and other Russian-speaking countries.

This certificate of achievement provides students, prospective employers and others with documented evidence of persistence and academic accomplishment in the language. The certificate requires completion of a minimum of 15 units from the following list of courses which must be completed with a grade of “C” grade or higher.

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

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.

| Area III, Fine Arts/Humanities | 3 units required |
| Area IV-B | Analytical Thinking and Oral Communication | 3 units required |
| Area V, Physical Education/Wellness | 1 unit required |
| Area VI, Cultural Diversity | 0-3 units required |
| Area VII, Information Competency | 0-1 unit required |


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, Dean
Humanities Building 112 and 113
925-685-1230 ext. 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.

<table>
<thead>
<tr>
<th>Program</th>
<th>Units</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>RUSS-120</td>
<td>5</td>
<td>First Term Russian</td>
</tr>
<tr>
<td>RUSS-121</td>
<td>5</td>
<td>Second Term Russian</td>
</tr>
</tbody>
</table>

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. 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 classes. 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 covered and reading and writing continues at an increasing level of complexity. There is continued study and interpretation of Russian and Soviet culture through literature and selected articles. 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. CSU, UC

RUSS-299  Student Instructional Assistant
.5-3 units  SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.
Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

SIGN LANGUAGE – SIGN

Students with prior sign language instruction should check with a sign language teacher regarding proper placement in sign language courses. The following system is generally used to determine the appropriate term of college work based on high school language: one year equals one college term; two years equal two college terms; three years equal three college terms.

SIGN-280  American Sign Language (ASL) I
3 units  SC
- May be repeated once
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
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. The course serves as an introduction to American Sign Language introducing expressive and receptive sign, the manual alphabet, facial expression, and body gestures. Emphasis is on conversational skills in functional situations, knowledge of deaf culture and the deaf community. CSU, UC

SIGN-281  American Sign Language (ASL) II
3 units  SC
- 54 hours lecture per term
- Prerequisite: SIGN 280 or equivalent
Course builds on basic principle and vocabulary introduced in American Sign Language I. Course further develops skills including expressive and receptive sign, the manual alphabet, facial expression, and body gestures. Emphasis on conversational skills in functional situations, continued vocabulary and grammatical expression development, and knowledge of deaf culture and community. CSU, UC
SIGN-282  American Sign Language (ASL) III
3 units  SC
• 54 hours lecture per term
• Prerequisite: SIGN 281 or equivalent
Using ASL I and II as a base, this course expands vocabulary and grammatical skills, both receptive and expressive. It will further develop conversational skills in functional situations, and lead to an appreciation of the deaf culture and history. CSU, UC

SIGN-283  American Sign Language (ASL) IV
3 units  SC
• 54 hours lecture per term
• Prerequisite: SIGN 282 or equivalent
Using ASL I, II, and III as a base, this course expands vocabulary and grammatical skills, both receptive and expressive. It will further develop conversational skills in functional settings, and lead to an appreciation of the deaf culture and history. CSU, UC

SOCIAL SCIENCE – SOCSC

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

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  The American Social Experience
3 units  SC
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent
A multicultural and interdisciplinary examination of the various interpretations developed within the social sciences of the roles of individuals and their experiences in American society. The course considers the roles of social institutions, federal, state, and local governments, and surveys the ideas and values that played a part in shaping America's cultural image. The course surveys the significant contributions of Latinos, African-Americans, Native-Americans, and women in shaping the evolution of the concept of American individualism. It also examines critical events in the shaping of social, political, and economic identity among national and gender groups in American society and culture. CSU, UC

SOCSC-111  Money, Power and Politics in the United States
3 units  SC
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent
A multidisciplinary, integrative study of the concepts of democracy and the historical, political and economic processes through which democracy has arisen in the United States, with emphasis on the U.S. Constitution and state and local government in California. Particular attention is given to the contributions to American democracy by diverse social groups, and the international context of American political and economic life. CSU, UC

SOCSC-115  Citizenship and Status: Asian Americans and Pacific Islanders in the U.S.
3 units  SC
• 54 hours lecture per term
• Recommended: Eligibility for ENGL 122 or equivalent
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 continuity of the American experience. In addition analysis of the political philosophies of the framers of the U.S. Constitution and the rights and obligations of citizens under the U.S. Constitution with an emphasis on gender issues will be covered. CSU, UC
SOCSC-123 American Popular Culture  
3 units SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
A multicultural and interdisciplinary examination of popular culture’s changing nature in American society. It examines the social institutions and values that shape American popular culture, and national and California state governments through the lens of popular culture. The course considers the significant contributions of Latino, African-American, Native-American, and Jewish communities in shaping the evolution of American popular culture, and considers the importance of women as both producers and consumers of popular culture. CSU, UC (credit limits may apply to UC - see counselor)

SOCSC-155 Topics in Social Science  
.3-4 units SC
- May be repeated three times
- Variable hours
A supplemental course in the social sciences to provide a study of current concepts and problems in social sciences and related substantive areas. Specific topics will be announced in the schedule of classes. 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. This course is taught on-site within the study abroad program. 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.
An opportunity for advanced students to study special interests under the direction of the faculty. CSU

SOCSC-299 Student Instructional Assistant  
.5-3 units SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.
Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

Social Science

SOCIOLOGY – SOcio

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

Possible career opportunities
Sociology provides students with career opportunities including criminologist, employment counselor, interviewer, researcher, social worker, and urban planner. Most career options require more than two years of college study.
SOCIO-120 Introduction to Sociology
3 units SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 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. The course introduces the discipline's substantive areas including methodology, socialization, culture, social stratification, race, and ethnic minorities, and begins institutional analysis with the family, religion, and education. 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 settings. 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 aging, health care needs, mental illness, environmental issues, labor force conditions, gender and sexuality, poverty, crime, juvenile delinquency, suicide, addiction, abuse, migration and relations with minority groups, or membership in deviant subcultures. CSU, UC

SOCIO-122 Critical Thinking About Social and Cultural Issues
3 units SC
- 54 hours lecture per term
- Prerequisite: ENGL 122 or equivalent
Critical reasoning in sociology is a process of questioning, analyzing and evaluating oral and written ideas, concepts, and interpretations of the political, economic and social issues and patterns found in human societies. This process will include an introduction to the principles of logic, the structure of language, the scientific method, and prevailing theoretical models in sociology. Specific writing skills will be developed through a series of increasingly complex analytical essays and through instruction in metaphor, analogy, comparing and contrasting, the nature of evidence, as well as essay structure and expression. The goal is for students to learn how to identify sociological viewpoints, to gather and analyze sociological information, to recognize sociological relationships and patterns, and to see the relevance of sociological insights 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. CSU, UC

SOCIO-131 The Urban Community
3 units SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
A multicultural look at social change in cities and in the suburbs which examines the experience of African-Americans, Latinos, Asian Pacific-Americans, Native Americans and Euro-Americans, currently and in historical perspective. The course addresses challenges that face people in multicultural communities, neighborhoods and suburbs, and examines programs and strategies that are designed to meet these challenges in US cities and suburbs. CSU, UC

SOCIO-135 Patterns of Ethnic Culture in America
3 units SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
- Note: This course fulfills the American Cultures requirement at U.C. Berkeley
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-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 classes. 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 advanced students to study special interests under the direction of the faculty. CSU

SOCIO-299  Student Instructional Assistant  
.5-3 units SC  
- May be repeated three times  
- Variable hours  
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.  
Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. 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.

Applied and Fine Arts Division  
Michael Almaguer, Dean  
Humanities Building 112 and 113  
925-685-1230 ext. 2312  
Possible career opportunities  
The study of Spanish can open up opportunities in communications, foreign trade and banking, transportation, government, the Foreign Service, tourism, library services, teaching, professional translating, journalism, and all levels of education, including university teaching. Most foreign language careers require more than two years of study.

Program level student learning outcomes  
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

Certificate of achievement  
Spanish  
Certificate of achievement - Spanish  
This certificate of achievement was created to give students the opportunity to show potential employers in this country and in other countries that the student has completed a certain number of courses in Spanish and prepares students with an intermediate to advanced knowledge of Spanish and familiarizes them with the culture of Spain and Latin America.

This certificate of achievement provides students, prospective employers and others with documented evidence of persistence and academic accomplishment in the language. The certificate requires completion of at least 13 units from one of the following lists of courses which must be completed with a grade of “C” grade or higher.

List A  
<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>SPAN 110 Beginning Spanish for Business I ............... 3</td>
</tr>
<tr>
<td>SPAN 111 Beginning Spanish for Business II ............. 3</td>
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<tr>
<td>SPAN 120 First Term Spanish ................................ 5</td>
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<tr>
<td>SPAN 121 Second Term Spanish ............................... 5</td>
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<tr>
<td>SPAN 220 Third Term Spanish .................................. 5</td>
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<tr>
<td>SPAN 221 Fourth Term Spanish ................ .................. 5</td>
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<tr>
<td>SPAN 230 Fifth Term Spanish ................................... 3</td>
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<tr>
<td>SPAN 231 Sixth Term Spanish ................................. 3</td>
</tr>
<tr>
<td>SPAN 250 Contemporary Spanish and Latin American Literature ...................... 3</td>
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</tbody>
</table>

List B  
<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>SPAN 121 Second Term Spanish ................................ 5</td>
</tr>
<tr>
<td>SPAN 155 First Term Beginning Conversational Spanish .................. 3</td>
</tr>
<tr>
<td>SPAN 156 Second Term Beginning Conversational Spanish .................. 3</td>
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<tr>
<td>SPAN 157 Third Term Beginning Conversational Spanish .................. 3</td>
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<tr>
<td>SPAN 220 Third Term Spanish ................................. 5</td>
</tr>
<tr>
<td>SPAN 221 Fourth Term Spanish ................................. 5</td>
</tr>
</tbody>
</table>

total minimum required units 13
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. 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. 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 classes. 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.  
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.  
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.  
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. 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. 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
•  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

SPAN-299  Student Instructional Assistant
.5-3 units  SC
•  May be repeated three times
•  Variable hours
•  Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.
Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

SPECIAL EDUCATION – SPEDU

Social Sciences Division
Lyn Krause, Dean
Faculty Office 134
925-685-1230 ext. 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.

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: www.dvc.edu/slo for the most current information.

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 higher. Required courses are available in the evening and during the day. Some courses may satisfy both major and other graduation requirements; 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.

**major requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 124</td>
<td>Child Development and Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 122</td>
<td>Psychology in Modern Life</td>
<td>3</td>
</tr>
<tr>
<td>SPEDU 101</td>
<td>Introduction to Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>SPEDU 102</td>
<td>Historical Perspectives of Disabilities and the Law</td>
<td>3</td>
</tr>
<tr>
<td>SPEDU 103</td>
<td>Classroom Strategies for the Special Education Paraeducator</td>
<td>3</td>
</tr>
</tbody>
</table>

**plus at least 1 unit from:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COUNS 115</td>
<td>Resiliency and Student Success</td>
<td>1</td>
</tr>
<tr>
<td>PSYCH 115</td>
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<td>1</td>
</tr>
</tbody>
</table>

**plus 2-4 units from:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
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<tbody>
<tr>
<td>COOP 170</td>
<td>Occupational Work Experience Education</td>
<td>1-4</td>
</tr>
<tr>
<td>COOP 170A</td>
<td>Internship in Occupational Work Experience Education</td>
<td>1-4</td>
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</table>

**plus at least 6 units from:**

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<tr>
<td>ECE 125</td>
<td>Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 126</td>
<td>Health, Safety and Nutrition for the Young Child</td>
<td>3</td>
</tr>
<tr>
<td>ECE 128</td>
<td>Advanced Curriculum Development in ECE</td>
<td>3</td>
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<tr>
<td>ECE 263</td>
<td>The Special Needs Child-Speech, Language and Hearing</td>
<td>1</td>
</tr>
<tr>
<td>ECE 265</td>
<td>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>
<tr>
<td>EDUC 120</td>
<td>Teaching as a Profession</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 122</td>
<td>Introduction to Reading Development and Interventions for K-3</td>
<td>3</td>
</tr>
<tr>
<td>MATH 124</td>
<td>Mathematics for Liberal Arts</td>
<td>3</td>
</tr>
<tr>
<td>SIGN 280</td>
<td>American Sign Language (ASL) I</td>
<td>3</td>
</tr>
<tr>
<td>SIGN 281</td>
<td>American Sign Language (ASL) II</td>
<td>3</td>
</tr>
<tr>
<td>SIGN 282</td>
<td>American Sign Language (ASL) III</td>
<td>3</td>
</tr>
</tbody>
</table>

**total minimum required units** 24

**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 higher. Required courses are available in the evening and during the day.

**required courses**

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**total minimum required units** 24
**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 roles of people with disabilities. The legal and functional definitions of physical, communicative, sensory, psychological, neurological, and developmental disabilities will be emphasized. Acquired versus congenital disabilities will be differentiated, and all forms of chronic/progressive illness will be explored. CSU

**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 para-professional within the educational workplace. Students will learn effective communication techniques to facilitate and manage appropriate student behavior and learning. CSU

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**SPEECH – SPCH**

Applied and Fine Arts Division
Michael Almaguer, Dean
Humanities Building 112 and 113
925-685-1230 ext. 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.

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**Program level student learning outcomes**
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: [www.dvc.edu/slo](http://www.dvc.edu/slo) for the most current information.

**Associate in arts degree**
Communication studies

**Certificate of achievement**
Communication studies

**Associate in arts degree – Communication studies**
The communication studies area views communicative behavior as central to human activity: to individual development, to interpersonal relationships, and to the functioning of political, economic, cultural, and social institutions.

The program prepares students who wish to attend a four-year university or professional school. In addition, as effective verbal and nonverbal communication is a requirement for most jobs, the program prepares students for a wide variety of professions. Further, the program prepares student for careers in the fields of public relations, communication education, the performing arts, marketing, sales training and management. Additional careers in fields related to communication studies include salesperson, broadcaster, lawyer, tour guide, political campaign worker, teacher, customer service worker, public and international relations specialist, and negotiator/arbitrator.

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 counselor at your prospective college for more information.

To earn an associate in arts degree with a major in communication studies, students must complete three core courses supplemented by twelve restricted electives from which students select a minimum of nine units. Students must complete each course used to meet a major requirement with a “C” grade or higher and maintain an overall GPA of 2.5 or higher in the coursework required for the major. Certain courses may satisfy both a major and a graduation requirement; however, the units are only counted once.

**major requirements**

- SPCH 120 Fundamentals of Speech ....................... 3
- SPCH 121 Persuasion and Critical Thinking .......... 3
- SPCH 128 Interpersonal Communication ............ 3

**plus at least 9 units from:**

- JRNAL 110 Mass Media of Communication ............. 3
- JRNAL 120 Basic Newspaper Techniques ............... 3
- SPCH 123 Argumentation and Debate .................. 3
- SPCH 124 Voice and Diction ................................ 3
- SPCH 130 Small Group Communication ................. 3
- SPCH 140 Effective Listening ............................ 1
SPCH 123  Argumentation and Debate  
3 units LR  
- 54 hours lecture per term  
- Recommended: Eligibility for ENGL 122 or equivalent  
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. 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 vocal instrument for the speaker. Drills and exercises will address vocal strength, resonance, inflection, articulation, and quality. This course is intended for the general student in oral communication, as well as communication, speech, and drama majors. 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. 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

Certificate of achievement - Communication studies

To earn a certificate of achievement in communication studies, students must complete three core courses supplemented by ten restricted electives from which students select a minimum of three units to meet their individual educational and career goals. The certificate program courses also meet some of the requirements of the major for the associate in arts degree in communication studies at Diablo Valley College.

required courses

- SPCH 120  Fundamentals of Speech 3 units SC  
- SPCH 121  Persuasion and Critical Thinking 1 unit LR  
- SPCH 128  Interpersonal Communication 3 units SC

plus at least 3 units from:

- SPCH 123  Argumentation and Debate 3 units LR  
- SPCH 124  Voice and Diction 3 units SC  
- SPCH 130  Small Group Communication 3 units SC  
- SPCH 140  Effective Listening 1 unit LR  
- SPCH 148  Performance of Literature 3 units SC  
- SPCH 155  Topics in Speech 0.3-4  
- SPCH 160  Projects in Public Speaking 1 unit SC  
- SPCH 161  Projects in Debate 1 unit SC  
- SPCH 162  Projects in Oral Interpretation 1 unit SC  
- SPCH 298  Independent Study 0.5-3  

total minimum required units 12
SPCH-148 Performance of Literature
3 units SC
- 54 hours lecture per term
- Recommended: Eligibility for ENGL 122 or equivalent
- Formerly SPCH 150

This course develops, through analysis and repeated oral performance, an appreciation for the skill of reading literature (poetry, prose, and drama) out loud. 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 classes. 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 as a member of the DVC Intercollegiate Speech and Debate Team. Students in this class may travel to tournaments in northern California and/or prepare speeches to present to local community groups outside of the class period. 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 as a member of the DVC Intercollegiate Speech and Debate Team. Students in this class may travel to tournaments in northern California and/or prepare debates to present to local community groups outside the class period. 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 as a member of the DVC Intercollegiate Speech and Debate Team. Students in this class may travel to tournaments in northern California and/or prepare oral readings to present to local community groups outside of the class period. 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

SPCH-299 Student Instructional Assistant
.5-.3 units SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants, and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

SPORTS MEDICINE/ATHLETIC TRAINING

See Physical Education Theory - PETHE

STEAMFITTING – STMFT

Physical Sciences and Engineering Division
Dennis Smith, Dean
Physical Science Building 261
925-685-1230 ext. 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. Course enrollment is limited to those who have been accepted by the local union responsible for the section. 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. Course enrollment is limited to those who have been accepted by the local union responsible for the section. 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-112 Use and Care of Tools
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 local union responsible for the section.
  • Formerly STMFT 250
The identification of tools encountered in the industrial environment. The proper use of trade-related tools. CSU

STMFT-113 Welding Safety/Plate Welding
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 local union responsible for the section.
  • Formerly STMFT 251
The introductory course in welding safety and theory. Beginning plate arc welding will be addressed. CSU

STMFT-114 Oxygen/Acetylene Cutting
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 local union responsible for the section.
  • Formerly STMFT 252
Oxygen and acetylene cutting and safety. Cutting for various plate thicknesses and layouts. CSU

STMFT-115 Pipe Shop 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 local union responsible for the section.
  • Formerly STMFT 253
The use of various pipe and fitting materials and their application. Using pipes and pipe fitting materials to build piping projects based on isometric drawings. CSU

STMFT-116 Pipe Shop 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 local union responsible for the section.
  • Formerly STMFT 270
Related technical instruction, supplementary to the apprentice’s on-the-job training. Student will be introduced to basic isometric drawing and basic steam systems. Copper connections will be made with solder and brazing procedures. 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. Course enrollment is limited to those who have been accepted by the local union responsible for the section. 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. Course enrollment is limited to those who have been accepted by the local union responsible for the section. 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. Course enrollment is limited to those who have been accepted by the local union responsible for the section. This class is the same as PLUMB 119.
  • Formerly STMFT 155
Interpret, coordinate and make drawings and sketches associated with piping installation. CSU
STMFT-120 Instrumentation 1
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 local union responsible for the section.
• Formerly STMFT 273
Related technical instruction, supplementary to the apprentice’s on-the-job training. Instrumentation 1 includes basic descriptions of processes, loop diagrams and documentation in the instrumentation field. CSU

STMFT-121 Instrumentation 2
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 local union responsible for the section.
• Formerly STMFT 274
Related technical instruction, supplementary to the apprentice’s on-the-job training. Instrumentation 2 will give the students the knowledge of pneumatic controls, liquid level instruments, analyzers and fiber optic signals. CSU

STMFT-122 Steam 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 local union responsible for the section.
• Formerly STMFT 275
Related technical instruction, supplementary to the apprentice’s on-the-job training. Introduction to the properties of saturated steam, traps, boilers and heating systems. CSU

STMFT-123 Electricity for Steamfitting
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 local union responsible for the section.
• Formerly STMFT 276
The specialized knowledge and techniques required to make electrical systems operate and function properly for the steamfitter working in the instrumentation field. CSU

STMFT-124 Industrial Rigging
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 local union responsible for the section.
• Formerly STMFT 278
Related technical instruction, supplementary to the apprentice’s on-the-job training. Student will review the different types, installation, operation and maintenance of industrial pumps. CSU

STMFT-125 Beginning AutoCAD
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 local union responsible for the section.
• Formerly STMFT 260
Introductory course covering the computer application AutoCAD as it relates to the creation of technical drawings. Course covers two dimensional computer aided drafting of objects in orthographic projection. Hands-on training utilizing a comprehensive overview of the software package and its applications in pipe drafting is stressed. Students are recommended to have a basic knowledge of technical drawing. CSU

STMFT-126 Advanced AutoCAD
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 local union responsible for the section.
• Formerly STMFT 271
Course is designed for students with previous knowledge and experience in using AutoCAD. Course covers surface/wireframe and solid modeling features of AutoCAD for 3-dimensional modeling and photo realistic rendering, customization and optimal application of AutoCAD and utility options for presentation purposes and project management. CSU

STMFT-127 Pumps
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 local union responsible for the section.
• Formerly STMFT 278
Related technical instruction, supplementary to the apprentice’s on-the-job training. Student will review the different types, installation, operation and maintenance of industrial pumps. CSU
STMFT-128  Tube Bending
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 local union responsible for the section.
• Formerly STMFT 279

Related technical instruction, supplementary to the apprentice’s on-the-job training. Students will complete projects related to tube bending and installations. Several tubing connection assignments will assist the student in recognizing different tubing connectors. CSU

STMFT-129  Union Heritage
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 local union responsible for the section.

This program is designed to review the heritage and traditions of the United Association of Steamfitters and Welders. Students will learn about past and current events with presentations and classroom interactions. CSU

STMFT-131  Pipe Welding 1
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 local union responsible for the section.
• Formerly STMFT 261

The techniques and methods for beginning welding processes for the steamfitting apprentice. Safe procedures and practices for use of cutting torch. Introduction of groove pipe welding. CSU

STMFT-132  Welding 5
1.5-3.5 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 local union responsible for the section.
• Formerly STMFT 262

The techniques and methods for welding processes for the steamfitting apprentice. Students will learn to identify various welding rods and their applications. CSU

STMFT-133  Welding 6
1.5-3.5 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 local union responsible for the section.

The techniques and methods for welding processes for the steamfitting apprentice. Techniques studied will include string beads on an open grooved pipe weld and proper torch positioning for advanced torch cutting. CSU

STMFT-134  Welding 7
1.5-3.5 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 local union responsible for the section.
• Formerly STMFT 264

The techniques and methods for welding processes for the steamfitting apprentice. Topics will include proper handling of grinders, identification of hazards and an introduction to square groove welding processes. CSU

STMFT-135  Welding 8
1.5-3.5 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 local union responsible for the section.
• Formerly STMFT 265

The techniques and methods for welding processes for the steamfitting apprentice. Techniques studied will include single vee groove coupons in various positions. CSU

STMFT-136  Welding 9
1.5-3.5 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 local union responsible for the section.
• Formerly STMFT 266

The techniques and methods for welding processes for the steamfitting apprentice. Topics will include identification of trapped slag using an x-ray image, as well as completing a root bead in a welding coupon in 6G position. CSU
**STMFT-137 Welding 10**
1.5-3.5 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 local union responsible for the section.
- Formerly STMFT 267

The techniques and methods for welding processes for the steamfitter apprentice. Topics will include identification of materials and tools needed for stainless steel welding processes, and both location and repair of welding defects on carbon steel pipe. CSU

**STMFT-138 Orbital Welding**
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 local union responsible for the section.

The training and certification for the Automatic Orbital Welding machine. CSU

**STMFT-140 Construction Management in Steamfitting**
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 local union responsible for the section.
- Formerly STMFT 272

An introduction to the administrative procedures, plans and specifications, scheduling and other forms of communication in the construction field. CSU

**STMFT-150 Topics in Steamfitting**
.3-4 units SC
- May be repeated three times
- 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 local union responsible for the section.

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 classes. CSU

**STMFT-299 Student Instructional Assistant**
.5-3 units SC
- May be repeated three times
- Variable hours
- Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU

**TAGALOG – TAGLG**

Applied and Fine Arts Division
Michael Almaguer, Dean
Humanities Building 112 and 113
925-685-1230 ext. 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 classes. CSU

**TRANSFER STUDIES – CSU**

Program level student learning outcomes
A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: [www.dvc.edu/slo](http://www.dvc.edu/slo) for the most current information.

Certificate of achievement - CSU General Education Breadth
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 CSU and graduation requirements; 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 requirements, 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 G.E. transfer information in this catalog)

**total minimum required units (CSU G.E. pattern)** 39

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**TRANSFER STUDIES – IGETC**

**Program level student learning outcomes**

A complete list of program level student learning outcomes for each program is available in this catalog in Section Four: Program level student learning outcomes. Students may also consult the website at: [www.dvc.edu/slo](http://www.dvc.edu/slo) for the most current information.

**Certificate of achievement - Intersegmental General Education Transfer Curriculum - 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 graduation requirements; 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 requirements, 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)

**total minimum required units (IGETC pattern)** 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 graduation requirement from CSU.

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**WORK EXPERIENCE**

See Cooperative Education - COOP
DVC catalog 2010-2011

Section five

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FACULTY AND ADMINISTRATORS

Abajian, Kathryn
faculty - English
B.A. - Brigham Young
M.A. - San Francisco State University

Abbott, Daniel
faculty - architecture
B.A. University of Oregon

Abele, Robert
faculty - philosophy
B.A. - University of Dayton
M.Div. - Mt. St. Mary
M.A. - Athenaeum of Ohio
Ph.D. - Marquette University

Agnost, Katy
faculty – English
B.A. - UC Davis
M.A. - San Francisco State University

Akanyirige, Emmanuel
faculty - math
B.S., M.S. - Ball State University

Akiyama, Mark
faculty - psychology
B.A., UC Berkeley
Ph.D. - University of Michigan

Almaguer, Michael
dean of applied and fine arts
B.A. - UC Davis
M.F.A. - San Francisco Art Institute

Appell, Glenn
faculty - music
B.A. - Hunter College, New York
M.A. - San Francisco State University

Armstrong, Terry L.
dean of counseling and student support services
B.A., M.A. - CSU Fresno

Avanessian, Garen
faculty - engineering
B.S. - Pahlavi University, Iran
M.S., Ph.D. - University of Wales, UK
M.S. - San Jose State University

Bach, Daniel J.
faculty - mathematics
B.A., M.A. - UC Berkeley

Bailey, Jamie Lynn
counselor
B.A., M.A. - Cal State University, Hayward

Bairos, Monte
faculty - music
A.A. - Merced College
B.A. - CSU Stanislaus
M.M. - University of Colorado, Boulder

Barber, Thomas P.
faculty - English
B.A. - Saint Mary’s College
M.A. - San Francisco State University

Barlow, Andrew L.
faculty - social sciences
B.A. - Oberlin College
M.A., Ph.D. - Harvard University

Baskind, Tamar
faculty - English
A.A. - Vista College
B.A. - UC Berkeley
M.A. - UC Davis

Bernhardt, Paul J.
faculty - hotel and restaurant management
B.V.E SF State University
A.S. - Johnson and Wales College

Bersamina, Leo
faculty - art
M.F.A. - Yale University
B.F.A. - SF State University
A.A. - Cabrillo College

Bessie, Adam
faculty-English
B.A. - UC Davis
M.A. - San Francisco State University

Blackwell-Stratton, Marian
faculty - English
B.A. - UC Berkeley
M.F.A. - Mills College

Borowski, Leon
faculty - chemistry
B.A. - University of Illinois
M.S. - UC Berkeley

Boyd, Linda R.
faculty - dental assisting
Registered Dental Assistant
Certified Dental Assistant
B.A. - CSU Hayward

Brecha, Jane
faculty - mathematics
B.A. - UC Santa Cruz
M.S. - CSU Hayward

Breton, Hopi
faculty - art
B.A. - Loyola University
M.F.A. Montana State University

Brown, Susan M.
faculty - English
B.A., M.A. - CSU Chico

Budd, Gary R.
faculty - English
B.A., M.A. - CSU Sacramento

Burns, Laura
faculty - chemistry
B.S. - Texas Lutheran College
Ph.D. - UC Davis

Burns, Robert
faculty - computer sciences
B.S., M.S., Ph.D. - Purdue University

Canada, Yvonne
senior academic/student services manager, San Ramon Valley Center
B.A. - Cal Poly, San Luis Obispo
M.A. - Bowling Green State University, Ohio

Carbonell, Ana Maria (Ía),
faculty - English
B.A. - Tufts University
M.A., Ph. D. - UC Santa Cruz

Carter, Cheryl
counselor
B.A., M.A. - CSU Hayward
Ed. D. - Pepperdine University

Carter, Hilton
counselor - dental technology
A.A. - Diablo Valley College
B.A. - Saint Mary’s College
Certified Dental Technologist
M.A. - United International University

Carter, Jamyle
faculty - mathematics
A.B. - Harvard University
M.A., Ph.D. - UCLA
Faculty and administrators

Castle, Karen  
faculty - physical science  
B.S., M.S., Ph.D. - University of Michigan

Chambers, Carla J.  
counselor  
B.S. - Central State University  
M.A. - Ohio State University

Chisar, Michael  
faculty - physical education  
(sports medicine)  
B.S. - CSU Fullerton  
M.S. Sahemman University, Pennsylvania

Chatagnier, Thomas J.  
faculty - electronics  
A.A. - Diablo Valley College  
B.S. - San Jose State University  
M.A. - Saint 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

Coccamiglio, Steven L.  
faculty - physical education  
B.A. - University of Hawaii  
M.A. - Saint 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

Conde, Killie  
faculty- counselor disability support services  
B.A. - CSU Hayward  
M.S. - San Francisco State University

Conley, James W.  
central service manager, interim  
Pacific Coast Banking School, University of Washington

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 - early childhood education  
B.A. - UC Berkeley  
M.S. - CSU Hayward

Costa, Kathleen  
dean of San Ramon Valley Center  
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

Dahl, Roshan  
business services supervisor  
M.S. - College of Accounting and Financial Science

Dannels, Lupe Carvajal  
counselor  
B.A. - UC Riverside  
M.A. - CSU Fresno

Dar, Mike  
faculty - physical education/athletics  
A.A. - DVC  
B.A. - CSU Chico  
M.A. - Saint Mary’s College

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

Delfrabo, George  
food services manager

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. - Saint Mary’s College

Di Bari, Isabella Castellano  
faculty - English  
B.A. - CSU Northridge  
M.A. - San Francisco State University

Dickinson, Jean E.  
faculty - journalism  
B.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

Dorado, Maria Isabel  
faculty - counseling  
B.A. San Francisco State  
M.A. Michigan State University

Dorn, Ileana  
director of admissions and records  
B.A., M.Ed. - Seattle University

Dougan, Susana "Raine"  
counselor - EOPS/CARE  
B.A., B.S. - UC Berkeley  
M.A. - Pacifica Graduate Institute

Drah, Christopher  
chef, faculty - culinary arts  
A.A. - Diablo Valley College  
Certificate - California Culinary Academy

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

Eckelmann, Claudia  
faculty - business  
B.A. - CSU East Bay  
M.A. - Saint Mary’s College

Edwards, Karen  
faculty - mathematics  
B.A., Ph.D. - UC Berkeley

Elsya, Mohamed  
dean of planning, research and student outcomes  
B.A. - University of Alexandria in Egypt  
M.B.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

330  FACULTY, ADMINISTRATORS AND EMERITI  DIABLO VALLEY COLLEGE  CATALOG 2010-2011
Fannin, Antonia  
faculty - English  
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

Fisher, Jane  
faculty - art

Flores-Lowry, Josephine T.  
faculty - physical education  
B.A., M.A. - University of the Pacific

Floyd, Donna  
vice president of student services, interim  
A.A. - Contra Costa College  
B.A. - California State University, Hayward  
M.A. - University of San Francisco  
Psy.D. - John F. Kennedy University

Foster, Bill  
bookstore manager  
B.A. - Colorado State University

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

Franco, Dennis J.  
faculty - counseling  
B.A. - University of San Francisco  
M.A. - John F. Kennedy 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. - Pennslyvania State University

Gallin, Lenore J.  
faculty - anthropology  
B.A. - University of Illinois  
M.A. - UC Berkeley  
Ph.D. - UC Los Angeles

Gard, Karen  
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B.S., M.S., D.V.M. - UC Davis

Gelinas, Richard P.  
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B.S. - Saint Mary’s College  
Ph.D. - UC Davis

Gerkin, Craig  
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B.S. - SUNY, Stony Brook  
Ph.D. - UC Berkeley

Gilmore, Raymond  
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A.A. - City College of San Francisco  
B.A. - UC Berkeley  
M.B.A. - Santa Clara University

Giulii, Maria J.  
faculty - economics  
B.A. - American University, Cairo  
B.A. - Gdansk University, Poland  
M.A. - San Francisco State University

Godinez, Richard  
faculty - art  
A.A. - Ohlone College  
B.F.A. - San Jose State University  
M.F.A. - Stanford University

Goen-Salter, Heidi  
faculty - English  
B.A. - UC Berkeley  
M.A. - San Francisco State University

Goga, Cindy  
director of the foundation  
B.A. - Arizona State University  
M.A. - University of Phoenix

Gonzales, Manuel G.  
faculty - history  
A.A. - Coalinga Junior College  
B.A., M.A., Ph.D. - UC Santa Barbara

Gonzales, Mike  
counselor  
B.A., M.S. - CSU Fresno

Goodman, Marcia Renee  
faculty - English  
B.A. - SUNY at Stonybrook  
M.A., Ph.D. - UC Berkeley

Goralka, Raymond  
faculty - biology  
B.S., B.A. - UC Davis  
Ph.D. - UC Santa Cruz

Gorga, Joseph  
faculty - biology/oceanography  
B.A. - University of San Diego  
Ph.D. - UC Santa Barbara

Grace, Guy  
buildings and grounds manager  
B.A. - Chico State.

Guess, Paul R.  
faculty - English  
B.A., M.A. - San Francisco State University  
J.D. - Hastings College of Law

Guevara-Flanagan, Kristy  
faculty - art digital media, broadcast and film  
B.A. - UC Berkeley  
M.F.A. - San Francisco State

Halm, Jacqueline D.  
faculty - humanities  
B.A., M.A. - San Francisco State University

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. - Saint Mary’s College  
M.A. - CSU, Hayward

Hartshorn, Mary Beth  
faculty - psychology  
B.S. - UC Davis  
M.A. - John F. Kennedy University

Hauscarriague, Elizabeth,  
dean of outreach, enrollment and matriculation  
B.S. - UC Davis  
M.S. - Regis University

Hawkins, Pamela E.  
faculty - business  
B.A. - UC Irvine  
M.P.A. - University of Pittsburgh  
Ed.D. - University of San Francisco

Hein, Claudia  
faculty - chemistry  
B.S. - Muhlenberg College  
M.S. - Oregon State University

Hess Diestler, Nicole  
faculty - drama  
B.S. - CSU East Bay  
B.A. - San Diego State University  
M.A. - Florida State University

Hetherington, Jean H.  
faculty - geology  
B.S. - Stanford University  
M.S. - University of Washington

Hewitt, Barbara  
faculty - health science  
B.S. - University of Vermont  
M.S. - CSU Hayward

Hill, Deya Brashears  
faculty - family life - early childhood education  
B.S. - Kent State University  
M.Ed. - University of Maryland

Hoffmann, James  
faculty - biological science  
B.A., M.A. - CSU Northridge

Holt, Buzz  
faculty - history and geography  
B.A. - Harvard University  
M.A. - UC Berkeley

Hong, Sae Na  
faculty - English  
B.A. - Wellesley College  
Ph.D. - Boston College
<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Position</th>
<th>Education Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horan, Kevin</td>
<td>Executive Dean, San Ramon Valley Center</td>
<td>B.A. - Saint Mary’s College, M.S. - Western Illinois University, Ed.D. - Saint Mary’s College</td>
</tr>
<tr>
<td>House, Valerie</td>
<td>Cashier’s Office Supervisor, Interim</td>
<td>B.S. - CSU Hayward</td>
</tr>
<tr>
<td>Huff, Mickey</td>
<td>Faculty - History/Social Science</td>
<td>B.A., M.A. - Youngstown State University</td>
</tr>
<tr>
<td>Hurley, Thomas</td>
<td>Faculty - English</td>
<td>B.A. - Siena College, M.A. - University of Virginia</td>
</tr>
<tr>
<td>Huynh, Loc</td>
<td>Faculty - Computer Information Systems</td>
<td>B.A. - UC Berkeley</td>
</tr>
<tr>
<td>Inclan, Jessica A.</td>
<td>Faculty - English</td>
<td>B.A. - CSU Stanislaus, M.A. - San Francisco State University</td>
</tr>
<tr>
<td>Isham, Markel</td>
<td>Counselor, International Students</td>
<td>B.A. - Howard Payne University, M.S. - University of Tennessee, M.H.R. - University of Oklahoma, M.Ed. - Texas Tech University</td>
</tr>
<tr>
<td>Izquierdo, Isabel</td>
<td>Faculty - Foreign Language</td>
<td>M.A. - University of Oviedo, Spain</td>
</tr>
<tr>
<td>Jacobs, James A.</td>
<td>Faculty - Journalism</td>
<td>B.A., M.A., M.S.S. - Syracuse University</td>
</tr>
<tr>
<td>Jacobson, Melissa S.</td>
<td>Faculty - History</td>
<td>B.A. - Seattle University, M.A. - Glasgow University</td>
</tr>
<tr>
<td>Jamshidnejad, Christie</td>
<td>Articulation Officer</td>
<td>B.A. - UC Davis, M.A. - San Francisco State University</td>
</tr>
<tr>
<td>Jerez, Brenda</td>
<td>Director, Financial Aid</td>
<td>A.A. - College of San Mateo, B.A., M.A. - New College of California</td>
</tr>
<tr>
<td>Jester, Catherine M.</td>
<td>Learning Disabilities Specialist</td>
<td>B.A., M.S. - Northwestern University</td>
</tr>
<tr>
<td>Johnson, David B.</td>
<td>Faculty - Mathematics</td>
<td>B.A. - UC Santa Cruz, M.A. - UC Berkeley</td>
</tr>
<tr>
<td>Johnson, Steven C.</td>
<td>Faculty - Anthropology</td>
<td>B.A. - UC Berkeley, M.A. - CSU Hayward, Ph.D. - UC Berkeley</td>
</tr>
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<td>Jones-Castellano, Jackqueline</td>
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<td>Karmon, Oshri</td>
<td>Faculty - Physics</td>
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<td>Faculty - Math</td>
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<td>Khaja, Gene</td>
<td>Faculty - Computer Science</td>
<td>B.A. - University of Punjab, Pakistan, M.S. - Utah State University, Ph.D. - University of Manchester, England</td>
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<td>Khandani, Seyed M.H.</td>
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<td>B.S. - Sharif University of Technology, M.S., Ph.D. - Massachusetts Inst. of Technology</td>
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<td>B.A. - Santa Clara University, M.A. - San Francisco State University, M.L.I.S. - San Jose State University</td>
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<td>Faculty - Mathematics</td>
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<td>Dean of Social Science</td>
<td>B.A. - Tabor College, M.Ed. - Trenton State College, Ph.D. - Ohio University</td>
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<td>A.A. - Diablo Valley College, B.A. - CSU Sonoma, M.A., M.F.A. - UC Berkeley</td>
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<td>Faculty - Business</td>
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<td>B.A. - UC Irvine, M.I.M. - American Grad. School of International Management</td>
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<td>Lamb, Susan</td>
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<td>Faculty - Horticulture</td>
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<td>Faculty - Chemistry</td>
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<td>Leitner, Patricia J.</td>
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faculty - English
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<td><strong>Opsata, Rebecca</strong></td>
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<td>B.A. - Macalester College</td>
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<td>M.A. - CSU Los Angeles</td>
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<td>Ed.D. - UC Davis</td>
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<td><strong>Seeferton, Carolyn M.</strong></td>
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<td>B.A. - University of Georgia</td>
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<td>M.B.A. - John F. Kennedy University</td>
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<td><strong>Shackett, Charles</strong></td>
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<td>B.A. - University of New Hampshire</td>
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<td>M.A. - San Francisco State University</td>
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<td><strong>Shears, Stacey</strong></td>
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<td>B.A. - City College of New York</td>
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<td><strong>Shi, Xiaofeng</strong> (Charlie)</td>
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<td>M.L.S. - San Jose State University</td>
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Smith, Dennis  
dean of physical sciences and engineering  
dean of biological and health sciences  
B.A. - UC Berkeley  
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Ph.D. - Union Institute and University  

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M.A. - Creighton University
EMERITI

Abbott, Leslie K. .......... drama
Adams, Chambers D. .... foreign
...................... language
Aguillo, Lillian .......... counselor, psychology
Ashby, Denise S. .......... speech
Atkins, Donna R. .......... English
Bacich, John ............ English
Baggett, Harry W., Jr. .... business education
Barnes, Linda J. ........ physical education
Barnickle, Stanley .......... counseling
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San Ramon Valley Center
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Janssens, Luc .......... foreign language
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Johnson, Fredric B. .......... music
Johnson, Virginia M. ...... mathematics
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Kamprath, Richard .......... music
Karp, Charles .......... health science
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Kirschbaurn, Lynda .......... computer information systems
Kirkwood, James D. ...... speech, drama
Kismet, Charles .......... health science
Kirkwood, James D. ...... speech, drama
Kirkwood, James D. ...... speech, drama
Kirkwood, James D. ...... speech, drama
Kirkwood, James D. ...... speech, drama
Lamka, Donald S. ........ history
Lasky, Marge .......... history
La San, Frank .......... counselor
Lee, Michael .......... tv/film
Ligon, Shirley A. .......... English
Lokke, Carol .......... computer science
Long, Anne H. .... disabled student services
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Lundgren, Susan .......... counselor, faculty - psychology
Macgregor, Sherry Lou .... humanities
Mac Michael, Lynn ........ humanities
Mah, Theodore M.Q. .......... business
Mahan, E. Don .......... English
Mannaberg, Robert L. ... social sciences
Martin, Kaye H. ............. astronomy
Emeriti

Mevi-Shiflett, Juliet............ nutrition and health science
McCrary, Delores ............ EOPS Director
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Nilson, Paul .............. senior academic student services manager
Nordstrom, Richard ......... engineering
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Nurock, Susan R............ family life education
Onizuka, K. Glenn.......... history/counseling
Ostarello, Georgiandra ...... biological science
Oxsen, Harold............... mathematics
Phalen, Paul W.............. speech
Piper, Ann .................... art/humanities
Pastermack, Monroe H..... health science
Patrick, Joseph............. economics
Pizanis, Michael.......... chemistry
Radford, Evelyn............. history
Rawls, James J.............. history
Reardon, Beverly......... family life education
Reeves, Bruce ........... English
Richter, Joanne M......... librarian
Richter, Roland E.......... librarian
Rosen, Leonard C........... physics
Ruiz, Luz Marina.......... art
Scholl, Allen A.............. music
Schrock, George........... history
Scofield, William R........ mathematics
Scott, Albert E............. social science
Scott-Summers, Diane .... vice president of student services
Searls, Robert C............ astronomy
Sexton, Ira J............... librarian
Shanks, Marlin............ drama
Shattuck, Sue M............. English
Shoemaker, Richard........ English
Shumway, John N......... history
Slessinger, William ....... foreign language
Smith, E. Diane........... philosophy
Smith, Jack L............ physical education
Spanier, John R............ English
Stallings, Kenley W...... computer information systems
Staubach, Karl H......... English
Steele, Elaine ............. English
Stephenson, William R...... oceanography, biology
Stoddard, Roy E......... physical science
Stone, Jessie M............ counselor
Stubblefield, Jimmy D....... counselor
Sturges, Clark............. English
Svensson, Floyd.......... engineering
Swan, James H............. physical education
Tarr, Joyce J............. business education
Tarr, William E............ social science
Taylor, K. Gabriel......... health science
Teravainen, Beaulah...... public health nurse
Thomas, Doris H......... business
Thomas, Catherine T...... family life education
Thompson, Ernest C........ music
Trempy, Robert............ history
Trezona, James H........ dental technology
Trujillo-Holman, Sandra ... senior dean outreach, enrollment, and matriculation
Valenzuela, Ernest J...... social science
Wall, Josephine O......... chemistry
Walsh, William J......... counselor, psychology
Warren, Eugene ............ English
Watson, Bruce A............ art
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Weir, John ........ art/photography
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Wen, David Y............. computer science
Westcott, Alan J.......... mathematics
Whitney, Gilbert............ counselor, psychology
Whitney, W. Sam........... mathematics

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Peterson, Phyllis.......... 1984-1996
Edelstein, Mark.......... 1996-2006

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TELEPHONE DIRECTORY

Students may call DVC or SRVC 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.

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<td>Telephone Registration</td>
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<td>Ticket Office</td>
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<td>Sorenson VRS</td>
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<td>925-866-1822</td>
</tr>
<tr>
<td>SRVC Division Office</td>
<td>5106</td>
</tr>
<tr>
<td>Admissions and Records Office</td>
<td>5999</td>
</tr>
<tr>
<td>Bookstore</td>
<td>875-9565 or 5129</td>
</tr>
<tr>
<td>Counseling</td>
<td>5110</td>
</tr>
<tr>
<td>Library</td>
<td>973-3380</td>
</tr>
<tr>
<td>TDD (for hearing impaired)</td>
<td>925-829-1230</td>
</tr>
</tbody>
</table>
To DVC Pleasant Hill
321 Golf Club Road, Pleasant Hill

680 Northbound:
exit Concord-Burnett Avenue
left on Diamond Boulevard
left on Concord Avenue
left on Contra Costa Boulevard
right on Golf Club Road
DVC is on the left

680 Southbound:
exit Concord Avenue
left at light, south on Contra Costa Boulevard
turn right on Golf Club Road
DVC is on the left

To SRVC - San Ramon Valley Center
1690 Watermill, Road, San Ramon

Take 680 exit on Bollinger Canyon Road
Proceed eastbound approximately 4 miles.
Right on Watermill Road
Left on SRVC Campus
Diablo Valley College is passionately committed to student learning through the intellectual, scientific, artistic, psychological, and ethical development of its diverse student body. Diablo Valley College prepares students for transfer to four-year universities; supports the economic development of the region; offers pre-collegiate programs; and promotes personal growth and lifelong learning.